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## ORIGINAL DEPARTMENT.

### COMMUNICATIONS.

#### SOME OBSERVATIONS ON THE TREATMENT OF COMPOUND FRACTURES OF LONG BONES.

BY J. H. WOODWARD, M. D.

(Concluded from page 229.)

Having finished these preliminaries, the surgeon should scrub the injured limb with a brush and soap-suds. This cleansing should be very thorough. The wound-region should then be thoroughly washed with sulphuric ether. Finally, wash the same part with a saturated aqueous solution ( $\frac{1}{2}\%$ ) of carbolic acid. A solution of corrosive sublimate ( $\frac{1}{1000}$ ) may be used for the same purpose. Constant irrigation of the wound and its vicinity with  $\frac{1}{1000}$  corrosive sublimate solution should be commenced at this stage, and continued until the surgeon is ready to apply the dressing. Two assistants should be at hand to keep the limb perfectly quiet during all manipulation of the wound. It goes without saying, of course, that as little unnecessary movement of the fragments as possible should be permitted.

You are now ready to make a careful examination of the case. You study every feature of it, and weigh everything, something after the manner previously sketched. A disinfected finger should be passed into every part of the wound to examine the fragments, to ascertain whether the bones are comminuted, the character of the deformity, the condition of the periosteum, the extent of the laceration, the condition of the arteries—in fact to ascertain the condition of everything in that region of the body. Should you

decide to be conservative in your treatment, the hints that will be given as we proceed may prove to be satisfactory guides to the fortunate recovery of the patient. They are offered as the outcome of observations extending through a considerable period of time, made both upon cases that were in our own wards, and also upon those under the care of other surgeons connected with Bellevue Hospital.

The wound should be cleansed of dirt, loose bone-etc., and washed again and again with  $\frac{1}{1000}$  solution of corrosive sublimate. The solution should be forced with a syringe into every crevice between the fragments, into every cranny of the wound. Sometimes it will be necessary to enlarge the original wound in order to accomplish thorough disinfection. No surgeon should hesitate to cut as extensively as necessary. Then reduce the deformity perfectly, if possible, and direct the assistants to maintain the fragments in good position, observing at the same time the degree of muscular tension in the limb. If the deformity be readily reproduced when the traction is discontinued, it will be difficult indeed to apply splints in such a manner that they will perform their function. That is true especially in cases of oblique fracture of the bones of the leg and arm. In such cases, it is best to suture the fragments with two or more silver wires. That operation should be done with care, lest the periosteum be unnecessarily injured. The silver sutures may be cut short to remain permanently in the wound, or they may be cut so long that the twisted portion may project through the skin. I have not seen an instance in which silver sutures have done the patient the least harm, and I know that

they have often assisted materially in the cure of the case. In compound fractures of the humerus, when there is much difficulty experienced in maintaining the fragments in good position, the silver suture should be used invariably. I shall not soon forget one such case which was not operated upon, although the indications were clear enough. The wound healed remarkably well, the patient did not have a rise of temperature higher than  $99\frac{1}{2}^{\circ}$ ; but the result was anything but flattering. For the fracture did not unite, and ankylosis, that, under the circumstances, could not be prevented, became so marked that the patient's whole extremity is absolutely worthless. I am thoroughly convinced that the disastrous result was owing to the failure to wire the fragments together.

Frequently, counter-openings should be made for the passage of drainage-tubes. Disinfected rubber tubes, with fenestra should be inserted at such points and in such numbers that retention of discharges becomes an impossibility. They should be fastened by an antiseptic silk suture and cut even with the surface of the skin.

It will be necessary to pass by other details in the management of the wound, to speak of the dressing that should be applied. The object in view is two-fold:

1. To prevent the entrance of germs and provide for the discharge.
2. To secure immobilization of the fragments.

#### TO PREVENT ENTRANCE OF GERMS.

Irrigation of the wound region, having been constant until the time for dressing has arrived, is discontinued. The whole surface of the wound is then sprinkled lightly with iodoform, and covered with disinfected, protective or rubber tissue, which has fenestrae opposite the drainage tubes. The protective should be thickly powdered with iodoform. Then apply loose antiseptic gauze to the wound, and pad the whole region as thickly as the probable amount of discharge may demand. The fragments are now firmly held in perfect apposition and an antiseptic bandage is applied to the limb to bind on the gauze with equal pressure and moderately tightly. If the injury be at the lower part of the leg, then this dressing would extend from the toes to just below the knee. If the gauze is applied properly, it alone will furnish considerable support, and it will absorb discharges very nicely. Now take several long strips of tin, which have been roughened by punch-hole, and mould them to the leg and foot. They should be long enough to extend from the toes to the knee-joint. These pieces of

tin must be perfectly aseptic also. Having moulded them properly, bind them in position with an antiseptic bandage. Thus will be formed a pretty firm support.\* Thick as it is already, the antiseptic dressing should be re-inforced by a liberal quantity of antiseptic cotton, which should be properly secured by antiseptic bandages.

#### TO SECURE IMMOBILIZATION OF THE FRAGMENTS.

The contiguous joints, flexed to the proper degree and padded with cotton, must be immobilized by the splints. Suppose for convenience of description that the tibia and fibula are fractured. The best external splints for such a case are an anterior and a posterior splint, which extend from the toes to the upper third of the thigh, and are made with cheese-cloth and plaster-of Paris. For making such splints, the following suggestions will prove to be reliable.

For the anterior splint, cut three layers of cheese-cloth long enough to pass from the toes to the middle of the thigh, and wide enough to cover one-half the circumference of the foot, leg, and thigh. Three more layers of cheese-cloth are cut of the same length as the first, but about one inch and a half narrower. Finally, three layers of cheese-cloth two inches wide, of the same length as the former, are prepared. For the posterior splint, cut five or six layers of cheese-cloth wide enough to cover one-half the circumference of the foot, leg, and thigh, and long enough to extend from the toes to the middle of the thigh. Of course, in measuring these strips allowance must be made for the increase in circumference of the limb made by the dressing and padding. Having prepared the cheese-cloth, a plaster of Paris cream should be made. To prepare this, take the best plaster that can be obtained, and be sure that it is free from dirt and moisture. Into a basinful of quite warm water, in which a handful of salt has been dissolved, stir the plaster slowly until a moderately thick cream is made. The anterior splint should be passed through the cream first. Saturate the widest pieces of cheese-cloth first, and lay them upon the limb and smooth them down nicely, and then saturate the second three layers of the anterior splint with the plaster cream, and apply them to the limb. Finally, saturate the narrowest strips with the cream, and lay them upon the median line of the former layers, and smooth all down nicely, and add more plaster with the hands. If you intend to suspend the limb, iron rings should be passed

\*Dr. W. F. Fluhrer was, I believe, the first surgeon to suggest this use of tin strips.

upon the narrowest strips of cheese-cloth before they are applied to the other layers. The posterior splint is now put through the plaster cream and saturated with it; then it is applied to the posterior surface of the foot, leg, and thigh. The manœuvres must be performed with celerity, or the plaster will set before the next step in process is taken. Such an accident endangers the value of the splint, which is apt to crack at important points, and be weakened thereby. Having placed the anterior and posterior strips upon the limb, they should be held in proper coaptation and bound upon the limb by plain crinoline bandages, which have been moistened. Of course, any description of bandage may be used instead of crinoline, but the latter when dry is quite firm, on account of the starch contained in it, and is, therefore, better than the ordinary muslin bandages. The limb may be held by assistants for a few minutes until the plaster is dry, or it may be supported on pillows; after the plaster has set, the limb may be supported by slings passed through the iron rings."—[See *Medical News*, December 1, 1883, p. 598.] It is important that the limb should be raised to a higher level than that of the body, and the splint must be allowed to harden with the knee-joint slightly flexed.

Some surgeons favor the roller bandage splint, which encircles the dressing. Sometimes fenestræ are cut opposite the wound. There are several good objections to that sort of splint. In the first place, I saw one patient bleed to death because the hemorrhage was concealed by the plaster, and was not discovered until the patient was beyond all hope. When fenestræ are cut of sufficient size to enable you to apply a reliable antiseptic dressing, the splint is very materially weakened, and, furthermore, the limb is apt to swell when the plaster is cut away, on account of the inequality of pressure, and cellulitis is not an uncommon accident. Moreover, the splint soon becomes loose and therefore useless. Bracket-splints are not worth the trouble of manufacturing. In cases treated with them the fracture is almost certain to heal in a bad position, on account of the backward bowing of the limb. The splint that I have described and recommended may be used again and again. It always fits the limb; it is light, porous, and neat.

The subsequent management of the case should be intelligently studied. The antiseptic dressing may, in many instances, remain in position without change for two or four weeks. If the wound have been rendered aseptic, if drainage have been

thoroughly provided for, if the dressings have been properly applied, there is no danger braved by permitting the limb to remain in the first dressing a very long time. During the first month at least, in a bad case of this sort, the patient's temperature should be accurately recorded four times, at regular intervals, every twenty-four hours. The patient's pulse should be studied attentively also. His diet for several days should consist of fluids, especially milk. And the action of his bowels and kidneys should be properly attended to. At the end of two weeks the dressing may be changed, but not earlier, unless there be some positive indication for it. A positive indication for redressing the case would be a high temperature, 102° Fah., which could not be reduced within twenty-four hours by a full dose of cathartic medicine. It is not uncommon for patients to have a temperature of 101° or 102° for two or three days after the first dressing. But the patient ought not to feel that temperature very much; and the thermometer should not register as high as 102° Fah. constantly for twenty-four hours. As early as the third day, the temperature should not be above 100° and should fall gradually below that point and continue to remain below it. Very frequently a little morphine will reduce the temperature, and very frequently light doses of quinine, gr. iij. to gr. v. t. i. d., will effect the same result. Small doses of tincture of aconite every half hour will often be efficient. If by these means the fever be reduced and does not recur again when the medicine is taken away, the wound need not be examined.

This method of dressing cases is new, I think, to this part of the country. You may find that you can hardly be satisfied to wait, so persistent will be the desire to see the wound. But I am sure that nobody will regret having exercised judicious patience.

The criticism that will most readily occur to one's mind at this point will probably be that the dressing which has been described is not only one that may be applied only by exercise of considerable care and attention to minutiae, but that it is expensive; and both statements would be true. Nevertheless, the dressing is the most practicable, the safest, and the most satisfactory one, of a large number of different dressings that I have intimate practical acquaintance with. We were perfectly satisfied that it was by far the best method we had tried. A sufficient reply to the first criticism would be, obviously, that it is not possible in the practice of our art—confessedly the most difficult of all arts—to attain excellence, amid circum-

stances that threaten danger, by means that favor ignorance or sloth. Clinical experience, confirming theoretical prediction, has proven beyond all reasonable doubt, that the aseptic-antiseptic treatment of wounds of all varieties is the most scientific, and, therefore, the best. As regards the expense of the dressing, it is apparently large, not really so, for it is changed only at long intervals.

Stimulants are nearly always necessary at first, and tonics are indicated later on. But the constitutional treatment, although very important, need not be so vigorous as in those cases that are subjected to other kinds of local treatment.

The same thorough antiseptic precautions already described must be observed whenever the case is re-dressed, including constant irrigation with corrosive sublimate solution. The same care in every respect must be taken. It may not be agreeable always to be so watchful, but in the end it pays.

Many compound fractures will heal very slowly, delayed union must be anticipated very often, and non-union, especially of fractures of the humerus, need not surprise any one. Necrosis of the ends of the fragments, causing exfoliation of bone, will be expected in the majority of bad cases. When contiguous joints are involved by the wound, ankylosis, generally of the fibrous variety, will ensue, and must be treated early by as vigorous passive motion as the condition of the parts will permit. In old people, ankylosis is very readily developed in healthy joints, and should receive special attention. Should it not be practicable to move the joints sufficiently, on account of the complaints of the patient, the surgeon must administer an anæsthetic and proceed with the treatment. For in such patients, when ankylosis becomes well-marked, it is very seldom managed successfully.

In spite of all your care and skillful attention a number of this class of compound fractures will not do well. And having attempted faithfully the conservative treatment you must amputate the limb. The advent of blood-poisoning must be noted the instant it becomes manifest, and, should it become unmanageable, it is imperative to amputate early, before the patient is much weakened by the disease.

With this imperfect sketch, I must leave the second division of our subject, and hasten to a conclusion. I do not wish to encroach upon your time and patience much further. To enter upon an exhaustive discussion now, would be indeed most serious business. I must, therefore, content myself and perchance delight you with a very

brief reference to the third class of compound fractures. Cases which I would group in this category are, as a rule, the least dangerous to life and limb of all compound fractures of long bones. The wounds are small, and the fracture usually a result of indirect violence. The soft parts are only moderately lacerated, the larger arteries, veins, and nerves uninjured. In a certain number of cases, some difficulty will be experienced in reducing the deformity. A sharp fragment may project through the skin and cause trouble. But enlargement of the wound, or resection of the bone, will remove every obstacle in many cases. Antiseptic precautions should always be observed in accordance with the description given at another part of this paper. Even though the wound be small, it communicates with the bone, and is large enough to admit myriads of bacteria. We should not relax our vigilant attention because the case is not a desperate one. Even the most trivial compound fracture, we must always remember, is a dangerous injury.

All wounds compounding fractures when due to direct violence, should be enlarged, and drained by a tube or by strands of antiseptic catgut twisted together. Small wounds, due to indirect violence, should be treated in the same way. Then, no anxiety need be felt lest there be retention of blood or pus. When the femur is fractured and the external wound is small, always enlarge the wound in the integument and fascia lata liberally, and drain the deeper parts with a rubber tube. In corresponding injuries of the arm, a similar plan should be adopted. Sometimes in cases of this class it is best to wire the fragments together. The indications for that operation have been given already. You may hesitate to perform such an operation in cases in which it is positively indicated. If you do so, beware!—for, sooner or later, you will have trouble on that account. Wiring bones together will not positively ensure union of the fracture, but it will secure many patients against non-union. In compound fractures of the humerus, if the splints will not hold the fragments properly, there is no excuse, now-a-days, for refusing to suture them together. The wound should be dressed antiseptically in the manner already described. The gauze and plaster splint may be used. I prefer to use plaster of Paris splints, for they may be so perfectly fitted to the conditions present. The limb should not be put up in the roller-bandage splint until the wound has healed, or the danger of secondary hemorrhage is past. When the wound has become a superficial ulcer, or when it has dwindled down to a sinus, during



the stages of necrosis, it is often advantageous to use the roller-bandage plaster of Paris splint. But, for reasons already given, I prefer not to cut fenestræ in the splints. When it is necessary to use a close-fitting apparatus, and also to dress the wound every three or four days, a light plaster splint, reinforced by thin pieces of tough wood, meets the indications excellently. The general management of the patient during the early weeks is the same for this as for the former set of cases. But these cases give rise to less anxiety, for they do well when properly managed.

Time will not permit me to attempt a more thorough discussion of the subject now. For taking leave of it at this point, however, I need make no apology. But, I trust that I have given some hints that will assist you in an hour of anxiety and doubt, and be then an abundant compensation for the patient attention awarded me to-day.

#### THE IMPEACHMENT OF THE BODY.

BY GEORGE L. BEARDSLEY, A. M., M. D.,  
Of Birmingham, Conn.

Cervantes noted that "every one is as God made him, and oftentimes a good deal worse." To this couplet might be joined another, that our physical structure was of more moment to the Creator than it has ever been to ourselves, and that we have made our souls the worse for its crucifixion. There are institutions ably endowed and widely revered, that have to do with the manufacture of creeds, the dissemination of tracts and the exhortation to holy conduct; but very few of our philanthropists are seemingly aware of the possible depreciation or wreck of any faculty save the moral. An odd enterprise would that be of establishing here and there stations with employees to talk on pepsin, to labor with stomachs abandoned to depraved desires, or to apply the balm that oozes from hot venison or a juicy rib-roast to a penitent vegetarian. No herald of the good news how to be saved the gnawing weariness of indigestion has yet sailed from any port, and the fear is firm that before the griefs of a wayward stomach become a fit tea-table topic, or the wails of a valetudinarian are examined with a twentieth of the earnestness that waltzing or lawn-tennis is studied, Hygeia and her serpent will have donned sack-cloth, and the race irrevocably given over to the laying on of oily hands, the exorcisms of a seventh son, or a fellowship with spooks.

It is a query to not a few why they have a body, and the longer they look thereon the greater they

picture the martyrdom of the soul. Could they have officiated at their own conception, they would mayhap have disowned the gizzard. This contempt for the body or indifference to its fruition or content, is a platitude that seems to be fathered by the same asceticism that generally makes "the good die first." Maurice tried to die by inches to intensify his sanctity, and no man before the time of Raphael was called pious who broke his fast. The "fathers" had grave doubts whether one could pat his belly and have any hope of being admitted into the galaxy of seraphs. To rank among the children of light required a reduction in weight, protracted exposure to hardships, an unsavory diet. Fuller, in his "Holy and Profane State," speaks of one of "a lean body and visage, as if his eager soul, biting for anger at the clog of his body, desired to fret a passage through it." One is inclined as he delves into the memoirs of the various paragons of the church to murmur that Juvenal's maxim was not read on the Mount.

It is not on record that any of these early saints were successful in discharging at will their mortal encumbrances. Not a few discovered that the paroxysms of a pinched stomach did not stimulate to holy living. It began to be less a heresy to occasionally measure inspiration by nice digestion—faith was found to ripen into "passionate intuitions" after a holiday of humor, or a ragout of rabbit. Luther thought bowling not incompatible with his sallies on error, and methinks the ale he drank fired his zeal for reforming the abuses in the church. Who that reads of Calvin can hesitate to trace the acrimony of his teaching to his sour stomach, or is not sure, after listening to Beecher in his talks about the life beyond, that this divine must have had toothsome steak and waffles for Sunday breakfast, and gained in grace among the Berkshire hills. The sallow dominie, the pallid statesman, and the abstemious nun, are ill-selected to give a fillip to purity, loyalty, or charity. Before the ruddy Hosmer, the stalwart Parker, and the burly Choate, the disciples of Pythagoras stand rebuked. Not by the cadaverous, grunty, and hungry Plotinus can a philosophy be evolved that is worth translating. The genius that is the guest of a body built up on oatmeal and turnip will wilt in the heat of dispute on deductions, or flag in the search for new creations. Irving was a happy writer because the administration of his internal republic was successful. Burns sang his most winning lays before the aromatic haggis and amid the hilarious cotters; and who dares believe that Humboldt could have grown so massive in

his generalizations and conceptions if fed on hard tack and sausage?

The list is not complete, the evidence is not all winnowed, but 'tis safe to strike an average and aver that in *belles-lettres*, commercial avocations, or the several professions, those who do the most good or exemplify the ideal nobleness of culture are not those who cripple the body, or are chary with the larder, or believe in a protracted Lent. If the various gynasiums for the Nous could be furnished with a painting of Jerome by Carotto, or if on our parlor-tables there could be scattered vignettes of Lord Bacon, bareheaded, in his saddle, defying the storm, a worthy service would such sketches render. They would hint to us to intersperse the daily plodding for the dollar and the anxious brooding on the morrow with yachting, cribbage, minstrelsy, and, mark you! with creature comforts, the messes that are highly nutritive and equally poculent, a roast of antelope, perhaps, or a delicious bouillon, followed by St. Paul's allowance of sherry (prescribed by a physician). It may be that there is no soul that is not worth a bid, but if the essence tallies at all with the impressions of its environment, paradise ought not to be gained by some spirits until they have sojourned somewhere and done penance for a miserly expenditure on the body. This by way of plausanterie, but, with seriousness, it is a prejudice with us that there is as much of honor to a finely-developed body as to a graceful use of language, a spirited imagination, or well-bred manner. If we are to look for fresh or frequent creations in the region of the speculative or the contemplative, we must pay heed to digestion, add greater richness to fibrin, register the pulse less, be liberal in living as in giving or thinking. The athlete honors the Creator, and a well-fed body is an admirable propagandist of the greatest of the three virtues, charity. Would there were more *bon vivants* among us—not cormorants, not gourmands, not prize devourers of quail, but those who believe in a diet that tickles the palate and does not tax the gastric tubules too severely, solid and savory dishes, with a dessert of mirth and music—those who are not insane in eating, but sensible as to what they ought to eat; those who are not epicures because full to contentment, but connoisseurs of digestion.

It is American to complete a repast as rapidly as possible—a galloping consumption at dinner-time is among the national disorders. The "nooning" is a serious interruption to money-making, and haste to consummate this recreation distinguishes the toilers after lucre. Scarcely one in

ten who patronizes a restaurant thinks of the pleasures of the service. They truly eat just to exist; and could they with a share of glory forego the needs of daily aliment, they would be abstemious. From this long spun-out procession of fast eaters is recruited the army of dyspeptics, snarlers, and pessimists, that haunt the fireside or roost on the accountant's desk.

It is surely not the tax on muscles nor the sapping of the nerve by thinking that makes us permanently gray or unduly fretful. The blanched cheek and withered palm and flabby leg are not witnesses of an overworked physique. The hod-carrier and the master of the spade sleep sweetly and find a green old age. No painful study nor self-communings about coming troubles interrupt the luxury of their living. Nothing is suffered to defer the season set for a meal. The Englishman gets his avoirdupois because of his bread and cheese, and jolly soul, the risus ambilis, the merry ditty or racy yarn, and the mug of beer restore the equilibrium, that intent devotion to business may have upset, between his liver and his wits. No feuds are fed, no hasty mastication is observed, no solicitude about some precarious lead mine is let loose at an inn. Johnny Bull may to us typify the braggart, or shadow the consciousness of individual worth, but albeit he puts to shame the ideas that obtain with us how to extract the sweets there are in living. The gout may embarrass him, but it seldom worries his neighbors as does the profile of a crusty vegetarian. Who ever heard of a dyspeptic Teuton? A honestly-bred Dutchman can never trace the outline of his spleen, and somehow has no use for a gall-bladder. These chubby fellows are the best customers at the stores of nature. At the table they tarry long. The dishes may to us be palling or of poor assortment, but they excite precious little commotion after a long acquaintance. Whatever a German eats, contributes to his good and growth, because of its serene digestion. To hurry him at a luncheon would be to engage his contempt. Their festivities are as protracted as they are frequent, and never abridged for business. The nappy lager stills anxieties about Western Union margins, and the hot sauer-kraut revives the spirits of a German broker disheartened at the C. C. & I. quotations. Seldom does a Dutchman feel a nerve snap; he carries no favor with blue pill or pepsin, and turns the last quarter of the race as sturdy as he entered.

Not until sentiment and æsthetics are so modified as to anticipate the cultivation of the physical graces, merry-making, and the perfection of

the cuisine in every family, will the logic of healthy living be divined. The stomach must be rated an honorable institution, and when "its solid stroke tells the being what's o' clock," its faithfulness must be handsomely rewarded. The table d'hôte must be hailed equally as a rise in Erie stock. Business and other varieties of labor must alternate with picnics, and junkets, with symposiacs and minstrelsy—detectives must be hired to ferret out frauds on the stomach, and furnished with search-warrants to explore the commissariat of subsistence in every family for trichinae, glucose, and sour beer—in every quarter the alarm must be sounded against saleratus bread and pugnacious doughnuts, and the doctrine of total abstinence from unctuous sausage and cohesive pie-crust vehemently enunciated. Let a regimen be general that ministers to the cheery symmetry of mind and muscle, let the culinary art be amplified and the larder stocked through the aid of a nicer appreciation of the fitness of its contents, let jolly digestion obtain as a correlate to the happy expansion of genius, and the parlor will fast cease to be an infirmary, and a ruddier set of saints will appear, whose wit, vitality, and usefulness, will not swoon in the afternoon of the "chase for fame."

## HOSPITAL REPORTS.

### NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

#### Pneumonia.

The next patient is a young man nineteen years of age, a German, single, and a grocer by occupation. He was admitted last evening. His family history is negative as regards pulmonary and rheumatic diseases. Patient had an attack of acute articular rheumatism eight years ago, but has had no subsequent attacks. Three months ago he exposed himself to venereal infection, and he contracted a chancre on his penis, and this was followed by the formation of a bubo in the left groin which went on to suppuration, and this is still discharging. He also has phimosis. He has been in the habit of drinking four or five glasses of beer a day, but does not use strong liquors. Has never had malarial fever. Four days ago he was exposed to the cold, and shortly after he had a severe chill, and this was attended with headache, and followed by fever and a perspiration. There was no vomiting. The next day he began to cough, and had a sharp pain in the right side, and he discharged a clear frothy mucous expectoration, and complained of shortness of breath.

Gentlemen, here is a young and vigorous man struck down in full health with an acute inflammatory disease, the nature of which you might

easily recognize from the appearance of his face and the character of his breathing. As a picture of acute pneumonia, you could scarcely imagine anything more vivid.

There is nothing in the personal history which has any special bearing upon his present disease, except that eight years ago he had an attack of articular rheumatism. There is a prevalent idea that croupous pneumonia is more apt to occur after, or in connection with, an acute articular rheumatic attack. This idea has arisen from the fact of the frequent association of croupous pneumonia and rheumatism in the same patient; for there often seems to be a tendency to an alternation of these two diseases. This man was taken ill suddenly on last Sunday with a chill, fever, and headache, and pain in the right chest. And he was brought in last night with a temperature of 105.2°, which rose at one o'clock this morning to 106.3°, and it continued throughout the night at 106.3°; and at 6 a. m. it was at 105.6°, and at 3 this p. m., 106.7°. This is a condition of hyperpyrexia, or of extreme high temperature. Anything above 106° is certainly a hyperpyrexia. And with this high temperature is associated a respiration of 60 and a pulse of 128. And these are conditions which are beyond the limits of safety laid down by Wunderlich as the safety points in pneumonia. This is the fourth day of the disease, and he is now entering upon the fifth day. Since he was brought in he has been taking quinine hypodermically as an antipyretic. Fifteen grains were administered at nine o'clock this morning, but it does not appear to have had any pronounced effect. Now, there is one thing about this high temperature to which I wish to call your special attention. This is a very high degree of temperature, and it is one in connection with which you commonly see symptoms which are not present in this man. It is usually accompanied by more or less cerebro-spinal irritation, which is evidenced by convulsive movements of the clonic description, and by subultus, and there is very apt to be a low muttering delirium. But this man's mind seems to be perfectly clear, and he has no delirium either at night or throughout the day, and he shows no evidence of spinal irritation, and there is no subultus. And the absence of these evidences of cerebro-spinal irritation, I think, makes this very high temperature in his case an object of less concern than it would be otherwise. Still it is a symptom which should excite the gravest apprehensions under any circumstances. Again, you notice that his respirations are very rapid, being sixty to the minute. Now we shall find when we come to examine him that the disease here is in the upper part of the right lung. And a pneumonia in this location, even though not as extensive as a pneumonia at the base of the lung, gives rise to a great deal more disturbance of the respiratory function, and it is a more serious locality for a pneumonic lesion than at the base. This man is perspiring freely, as you see, and his tongue and lips are moist, and this, with the absence of extreme prostration and of any cerebro-spinal symptoms, constitute a very striking feature in this case, and is a departure from the ordinary. The affinity of croupous pneumonia to acute inflammatory rheumatism is shown in the tendency of both to a hyper-

pyrexia; and excessive acid sweating is, as you know, a common feature of acute inflammatory rheumatism. Excessive sweating is certainly a feature here, and it has an acid reaction to litmus paper, which it turns red.

Upon percussion here, I find marked dullness upon the right side just under the clavicle, and I suppose the signs of consolidation are more marked behind. Upon auscultation, I get distinct bronchial respiration and bronchial cough above, and abundant dry friction rales in the lower portion of the right chest in front. There is always with pneumonia a certain amount of pleuritis, and there is never a pleuritis without some adjacent pulmonary consolidation.

The question of treatment here is one of very great importance. This very high temperature presents the indication of greatest moment. A hyperpyrexia you must try to control with every agent at your command. So very energetic means must be adopted in this condition. It is for the relief of this condition that cold effusions and cold bathing have become generally adopted. And I suppose that there is no measure which has so immediate and so marked an antipyretic effect as a cold bath which is gradually cooled down from a temperature of 80 or 90 degrees to 50 or 60 degrees, with the patient in it. In this way you can reduce the bodily temperature 5 or 7 degrees in a very short space of time. There is no better illustration of the exhausting effects of a high temperature than is witnessed in those cases where this high temperature is suddenly checked by the cold bath. I have seen patients suffering from an acute rheumatic fever, tremulous with spasm of all the muscles, and with low muttering delirium and a dry tongue, put in a bath of 80°, which was then cooled down to 50°, and the temperature having been reduced 5° or 6° in as many minutes, they were then put back into bed with the muscles perfectly steady and the mind illuminated so that they would answer questions. And I have then seen the cerebro-spinal irritation return with the rising temperature, and again made to disappear by the use of the cold bath. And in several instances patients have been snatched from the jaws of death by the energetic application of this cold water treatment of high temperature. There is no remedial agent that I know of which can be so much relied upon to reduce the temperature promptly and efficiently as the cold bath. But I confess that I cannot say that it is perfectly safe to put a patient with pneumonia into the bath. I never dared to do it, but I don't know but that we ought to have courage to try it. Yet those cases where it has been tried are not very conspicuous for their success. So I should not resort to it here. There are other antipyretics which may be employed. Quinine has signal and specific powers in the high temperature of malaria, and I think it also has a good deal of power in the high temperature of croupous pneumonia. In many instances I think I have seen it produce very decided effects, but it does not seem to have accomplished much here. But quinine is not the only antipyretic we have. Salicylic acid is another, and it is especially valuable in rheumatic affections and in the hyperpyrexia of rheumatic fever. I am inclined, in view of the association in this case of previous at-

tacks of rheumatism and this pneumonia to try it here, and possibly it may have more effect than the quinine. We will therefore put him on doses of twenty grains every two hours.

#### A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY WILLIAM GOODELL, M. D.,

Professor of Gynecology in the University of Pennsylvania.

Reported by WILLIAM H. FOX, M. D.

##### Carcinoma of the Cervix Uteri.

GENTLEMEN: While waiting for our patients to be made ready, let me say a few words to you in regard to cancer of the neck of the womb. We have two cases for treatment to-day, and let us consider first as to the best operation to be performed.

Some gynecologists advise total extirpation of the uterus, and this is a good operation, provided you see the patient before the uterus is fixed; but unfortunately the onset of this disease is not attended by any pelvic pains and aches greater than those evoked by ordinary uterine troubles, and they are disregarded. You therefore generally find the uterus fixed either by cancerous infiltration, or by inflammatory exudation. This puts extirpation out of the question. The operation by extirpation is far from being free from danger; some patients die on the table, and others die in a few hours from shock, hemorrhage or peritonitis. The mortality is large, and even if the woman should recover, the disease is very likely to return. Now is the physician justified, knowing the peril of the operation, and knowing the likelihood of relapse, in performing the operation? I for one am still in doubt on this point. I performed this operation last fall; the womb was freely movable and was easily extirpated per vaginam.

In the operation of extirpation by the suprapubic method, the recti muscles are found tense and the womb low down; it is a difficult operation at best, almost impossible in a fat woman, and beside, one runs the risk of including the ureter in the ligatures, a misadventure always ending fatally. The operation per vaginam is easier in performance if the parts are sufficiently lax. The vagina is incised around the cervix, and stripped off. The anterior and posterior cul-de-sacs are opened. To facilitate this, a strong ligature is passed through the cervix, by which the womb is dragged down and pulled backwards and forwards as required. An obstetric crochét is passed into Douglass' pouch and hooked over the fundus, which is now pulled down through the wound into the vagina. A ligature is next passed through the fundus of the retroverted womb, and traction made on it. This brings the broad ligaments within operative reach. One of them is ligated en masse. It is then transfixed by a double ligature, tied, and cut off close to the womb. The other broad ligament is tied and severed in the same way, leaving the ovaries and fimbriated extremities of the oviducts behind. A very few stitches close the vaginal roof, excepting the point where the ligatures come out, and the vagina is packed with absorbent cotton, thickly covered with iodoform.



My patient died from peritonitis on the third day. I do not know why, for every antiseptic precaution possible was taken. So, as I said before, I am still on the fence. A couple of years ago I appointed a day for the same operation on another patient, but on the day before the woman went off into uræmic convulsions, and albumen in large quantities was found in the urine. I, of course, did not operate, although the poor woman, who clung to life most desperately, begged and implored me, by tears, by prayers, and by the most piteous entreaties, to remove her womb. It was a very sad case, and I shall never forget it.

The operation I prefer is to remove as much of the cervix uteri as possible, by incising the vagina at its junction, and stripping it up as far as possible without wounding the peritoneum, or the blood-vessels which lie in the broad ligament. This denuded cervix is then cut off with the curved knife of Paquelin's thermo-cautery, and the stump is then well charred by the platinum button. This, in the majority of cases, makes a very effectual obliteration of the diseased parts, for fully one-half to two-thirds of the womb is removed. The success attending this operation is great; and sometimes the surgeon will be rewarded, as I have been, by a cure. One cannot always perform this operation, for the extent of the disease, or the peri-uterine exudation may make it impossible; but I think it is the best, and it is certainly not very risky.

Three times I got into Douglas's *cul-de-sac*, but no bad results followed. In my last case I did not find it out till I saw the intestines gleaming through the wound. I sutured the parts with silver wire, and the lady made a good recovery without any bad symptoms due to the accident.

The patient whom I now bring before you is the one I examined two weeks ago in this clinic, and you all will remember the free bleeding which took place from the gentle touch of my finger. Generally the hemorrhage is very free, sometimes dangerously so during the operation; but by injections of undiluted vinegar, and by working rapidly, one can ordinarily avoid an excessive loss. Yet a friend of mine, a very able surgeon, lost a case on the table from hemorrhage.

In one of my cases the hemorrhage came from an artery as large as the radial, and matters looked squally; but I succeeded in seizing the vessel with a pressure-forceps. At first I intended to leave it on for forty-eight hours, but finding that the vessel could be pulled out somewhat, I ligated it by twisting a silver wire around it. Wire was used instead of silk, because the latter could not be tied in so confined and deep a place as the bottom of the wound. Bleeding usually ceases when the sound tissues are reached. This patient is a multipara, and I wish to impress on you one point as important. A cancer of the cervix, in my experience, always occurs in women who have borne children, and not in virgins or in sterile women. This is owing to the fact that the raw and irritable surface of a torn cervix, with ectropion, presents all the circumstances favorable to the development of cancer. So, if a woman who has borne children, comes to you with a history of uterine hemorrhage beginning after the menopause, you will suspect at once that she has had a lacerated cervix, which by con-

stant irritation has degenerated into cancer. Malignant disease of the body of the womb does occur, but it is rare, and in my experience is generally a sarcoma, and is a disease more peculiar to old maids and to sterile women. I often ask the question in the final examinations: what should your off-hand diagnosis be, were a lady, past the climacteric and the mother of several children, to come to you with a history of uterine hemorrhage? The correct answer is, "*Cancer of the cervix uteri*," and am always vexed when I do not get it, because it is a practical question, and one which I harp on very frequently in these clinics. Another question which I ask is: supposing an old maid or a sterile wife, approaching the climacteric, comes to you with a history of menorrhagia, what should you suspect? The answer is: Some benign growth, such as fibroid tumor, polypus or fungous vegetations of the endometrium. It might turn out to be a cancer or a sarcoma of the body of the womb, but that would be exceptional. Benign growths are the rule in such cases.

In the case before us, the disease has advanced too high up, and the peri-uterine exudation or infiltration is too extensive, for me to amputate the cervix in the way which I have described, and I must remove it in another way. With the fingers of my left hand, so as to keep a clean right hand—the obstetric hand—I tear away as much of the fungous mass as possible, and, to prevent hemorrhage, as rapidly as possible.

(To be continued.)

## MEDICAL SOCIETIES.

### CHICAGO MEDICAL SOCIETY.

Dr. D. A. K. Steele, President.

Regular meeting August 4, 1884.

Dr. J. H. Etheridge read a paper on

#### The Etiology, Pathology, and Treatment of Cholera.

The following abstract of the treatment in the paper, contained along with the discussion, is herewith presented:

The treatment of cholera to-day is changed but very little from what it was sixty years ago. Innumerable attempts have been made to change and improve it, but all have been to little or no avail. A better idea can be obtained of the new efforts in trials at improving cholera remedies perhaps by giving the treatment of three score years ago, and afterwards giving briefly an enumeration of the various additions to treatment recommended from epidemic to epidemic than in any other way.

"Calomel certainly comes next in order, and when employed in proper doses with the assistance of opium, and more particularly in the early stage of the disease, seems to be equally effective among natives as venesection among Europeans, in arresting its progress.

The outline of treatment alluded to is to administer 20 grains of calomel, and to wash it down with 60 drops of laudanum and 20 drops of oil of peppermint in 2 ounces of water, and to support the warmth by external heat, the hot bath, and hot friction, and internally by cordials."

Thus wrote Dr. James Johnson in 1824, in his classical work on "Tropical Diseases."

The discussion this evening will indicate how much substantial progress has been made beyond that of sixty years ago. Then the idea seemed to be "to start the bile"—as the expression then was—and afterward to quit with opium and support the powers of life. Are we much in advance of this treatment in 1884? *Nous verrons.*

The epidemics succeeding 1817 seemed to call out the following remedial agents. The writer finds mention made of none of them prior to the dates accompanying them. The mere enumeration of them will suffice to show how lamentably fatal cholera has been, and how helpless medical skill is in rescuing human life from this scourge. Many remedies that we now see heralded in print as new and wonderful in curing cholera are very old. Many remedial measures are mentioned in these lists which provoke a smile of pity or of incredulity.

The epidemic of 1826-27 called out the following named agents as useful in curing cholera: carbolic acid, hydrocyanic acid, nitro-muriatic acid, alum, antimony, arnica, bismuth, buchu, cauterization, chlorine, counter-irritation, cupping, enemata of cold water, gold chloride, oxygen, purgatives, sodium chloride.

The epidemic of 1832-34 brought out the following named remedies. The lengthy list of agents is perhaps explained by the fact that the epidemic was a terrible one in its severity and mortality: Sulphuric acid, albumen, alkalies, ammonia, bandaging, baths of hot air, baths of nitric acid, baths of sand, baths of vapor, belladonna, bile, bladder injections, blood transfusion, cinchona, coffee, columbo, copper sulphate, creosote, diuretics, electricity, evacuates, enemata of narcotics, enemata of salines, enemata of tobacco, guaco, hemospasia, horse-radish, ice, inhalations, injections—venous—saline, ipecac, iron, juniper berry oil, lead, ligature, lime water, milk injection—venous, musk, nitrous oxide, oil cajuput, oil croton, percussion—tapping on the abdomen, salines, stimulants, strychnia, sudorifics, tournaquet, turpentine, water—cold.

In 1848 the following remedies were brought forward: Hydrochloric acid, anæsthetics, arnica, camphor, capsicum, carbon, carbon bisulphuret, chloride, chloroform, ergot, ether, gunpowder, hydrotherapie, matico, metals, naptha, naphthaline, silver nitrate, silver oxide, sulphur, cold, zinc oxide, zinc valerate.

The epidemic of 1854 brought out the following named remedies: Alcohol, calcium chloride bath, cider—hard, cinnamon oil, eupatorium, garlic, movement, cinnaon, potassium permanganate, quassia, sugar, vaccination, water injection into the peritoneal cavity.

The following named remedies were suggested during and following the epidemic of 1865, '66: Carbolic acid, nitric acid, nitrous acid, air—insufflation of, amyl nitrite, calabar bean, chloral, chlorodyne, coca, dosimetric treatment, hypodermic injections, magnesium sulphate, potassa liquor, spinal ice-bags, water—hypodermically, wine—lavements of worara.

The only untried remedies suggested in 1873 were sulphurous acid, antimony, chloralum.

In the discussion, which consumed nearly three

hours, Dr. I. N. Danforth gave the pathology of cholera from studies and researches of the disease. Every organ of the body, said he, is more or less affected, but there are three lesions that are apparently uniformly present; namely, the blood, intestinal canal, and in the kidneys. This, I say, appears to be uniform. The blood in the early stage becomes thickened and may not flow; it is sometimes stationary, and is filled or invaded with microbes, or other living organisms; they are not related to the causation of cholera, and the same variety is not always found in the blood, in the intestinal canal, or in the discharges. Cholera is not produced by any specific germ. The blood loses its watery portion with great rapidity and to great extent. In 1873, during the localized epidemic of cholera here, he investigated specimens of the discharges of the intestinal canal from both ante-mortem and post-mortem cases, and in each he found vast numbers of micrococci, and other low organisms, but he is sure they had nothing to do with the causation of cholera, but that there was formed a nidus for their development.

Ziegler, Lieber, and La Barra, or La Blat, according to Ziemssen, assert the same thing to be true, and that they are incidentally there, and "spring up" in the intestinal fluid; or, in other words, it is a field for them.

The speaker demonstrated his remarks by illustrations on slides from portions of the intestinal canal and fluids that he had mounted. The first drawing represented a piece of the intestine about the middle of the attack of the disease, and showed a grouping of cells and granular matter. Some authors state that the intestinal epithelium is not discharged until after death; but I am positive they are thrown off before death as well, that the canal is stripped of its epithelial coating while the patient is living, or that the villi are stripped off; or, if you choose to state it, the villi are stripped from their coating of cells.

A specimen of the ileum was shown, representing a portion of it from about ten inches above the valve, and the cellular coating of one of these villi specimens of Peyer's glands were shown, and illustrated their swollen or distended condition, with a group of cells and many nuclei.

The whole surface of the lining of the intestine becomes very red, or of a bright pink color, and ecchymotic patches form. The arteries are less distended, but there may be formed an enormous amount of stagnant blood in the intestinal canal.

*The Lesion of the Kidneys.*—At an early stage of the disease the organs undergo a rapid fatty change; they become enlarged; so too does their cortical portion. This acute fatty change rarely ever becomes chronic should the patient recover (he was sure it did not become so if the patient died). The liver, the spleen, the brain, and spinal cord, may sometimes become hyperæmic; doubtless they become so quite often. Now these changes do not throw a great deal of light upon the cause of cholera, if any at all. Indeed, we have not arrived at the cause. Those writers and authors who state that there is a specific cholera germ, but do not state what it is, are not positive. Koch believes he has discovered the germ, but his experiments to prove it thus far have been futile. Lesions occur in the small intestine, the rectum included, due to an invasion

of germs or a virus, of which we do not know as yet what it is, and its effects further determine to the emunctory organs and affect depuration. First, the intestinal discharges, and on that ground the blood loses its watery and saline element, and the kidneys fail in their function.

Dr. W. T. Belfield, regarding a special organism, he would first state his knowledge upon this subject was in one sense second-hand. He would endeavor to recapitulate briefly Dr. Koch's discoveries whilst he was in Egypt and India. There is constantly present in the wall of the intestine an organism that is easily recognized by reagents and stains, that are never present in the blood or any of the organs of patients who die from other diseases or causes. However, this does not prove that this organism is the cause of cholera, or that the cause of relation exists as it does in some other infectious diseases, notably one or two as will be mentioned later. The association may be explained in one or two or three different ways. Of course, it may perhaps be a cause. To decide this (a matter quite impracticable or unlikely) would be to inoculate a human being, to produce the disease by separating the organism from the juices and transmitting it to a healthy human, the same as a healthy animal can be inoculated with anthrax. Koch states that there is a specific germ that is constantly associated with cholera, and that no other germ is present; but when he applied the crucial test of separating that organism and endeavored to inoculate dogs, cats, and white rabbits, his experiments failed. But on the other hand this does not prove or disprove that there is a specific germ to cause cholera, for none of these animals will take cholera. They are immune from the disease, although there may be certain domestic animals that will contract the disease. The bacillus alluded to by Koch, as he asserted, is always present and distinguishable from other organisms, and they rapidly multiply. In relapsing fever are found other low organisms. The spirillum is always present in the acme of that disease. I think the germs that exist in choleraic discharges are in the relation of association only. Regarding their natural history, they flourish most in a slightly alkaline fluid, and acids destroy them, and are or should be a principal adjunct to the treatment of cholera.

Dr. John Bartlett, upon invitation, gave the results of some interesting experiments made in 1874, on a fungus, and his deductions therefrom, which are as follows: The fungus undergoes phases of development; first it is a cell (come vasis), and is the active agent to alter and impair the blood and tissues. This, we suppose, is ultimate. In ague it is a cell in a developing fluid, but does not rest as a cell. It aggregates and deteriorates tissues. These cells form a certain crystalline something. This crystalline substance is not lifeless; it puts forth buds; these set forth a fluid; it is homogeneous; it apparently is nothing, yet it is a protoplasmic fluid, and there exists a cell form of material crystalline substance—a bud—a fluid which is protoplasmic and cells form again identical to those that were first formed. The cells, too, may be inert and not self-multiply, the protoplasmic fluid is not recognized in the blood, invisible atoms become visible atoms. Dr. Koch's experiments thus far have

given unsatisfactory results. He may demonstrate the micrococcus, or bacillus, so that it can be seen with the naked eye. Protoplasmic fluid is not recognizable by the aid of the microscope until cells are developed.

Dr. C. G. Smith stated that there seemed to be many points to settle at this time relative to the contagiousness of cholera; all the old theories in this respect seem to be changed. Years ago he made up his mind that it is highly contagious; he had been surprised to see a woman with the experience of Florence Nightingale pronouncing against this theory. Some physicians state, it is scarcely necessary to take any special precaution to prevent contracting the disease. Some French physicians, it is reported, were so enthusiastic upon this, that they have tasted—drank—the discharges from patients dying of cholera, and did not take the disease. In 1854, he believed, it had been demonstrated that the discharges were contagious. Not when they are fresh, but when it ferments and has decomposed. The whole history of the disease proves its communicability. In India moisture and filth propagate the disease, and it becomes started on the grand march along the great lines of travel around the world. This it does not quite do, for he never heard or knew of an outbreak of it in Australia. This looks to him as though the scourge could be “stamped out” by vigorous executive quarantine measures, and we should quarantine ships before they reach this continent, where there are lurking suspicions of cholera aboard; for if the disease should come here and travel along our railroads to cities not along the sea-board, it is a much more difficult matter to “wipe it out.” In the last epidemic in this city there seemed to be a focus of cholera at Butterfield and Thirtieth streets, and twenty cases of cholera “sprung up” at once. The inhabitants were removed, the houses were fumigated, and the other premises were cleaned and purified, and the disease was immediately “stamped out.” It is a malignant poison, and finds its way into the intestine, and nature makes an heroic effort to rid the system of it, by profuse perspiration, pouring out of serum, all of which is analogous to an eruption. The result of the morbid symptoms is purging and vomiting, thickening of the blood, want of urinary secretion by failure of the kidneys to act, appearance of cramps, etc., etc., until a final stage of collapse and death is reached.

A letter was read from Dr. John H. Rauch, Secretary of the Illinois State Board of Health, as follows:

“SPRINGFIELD, ILL., July 29, 1884.

“Dear Doctor: I am in receipt of your letter of the 24th inst., asking if I have any sanitary suggestions to make for the benefit of the society and the protection of the health of the city, in view of the possible danger of an epidemic.

“As a matter of public policy, I think it better that such suggestion with reference to Chicago should originate with Dr. De Wolf, and in my judgment he is doing all that he can with the resources at his command. The Chicago Medical Society, however, may strengthen his hands morally, and possibly help to increase his material discussions, as are proposed. The condition of the river, and especially of the South Fork, is a

matter of the utmost importance to Chicago in the event of a cholera epidemic—and, indeed, at all times. Sixty thousand cubic feet per minute, transferred from the river to the canal, will keep the former clean and harmless; will prevent the possibility of pollution of the water-supply at the crib; will affect 66 per cent. of the South Fork, and will so dilute the sewage as to make the canal unobjectionable to the communities along its banks. To secure this transfer requires two things: 1. That the pumps at Bridgeport be operated to their full capacity. 2. That the waters of the Des Plaines river be prevented access to the South Fork through the Ogden ditch.

"If the society can achieve this, it will render a most important service to Chicago; will help De Wolf in his arduous work, and earn the gratitude of 150 miles of cities, towns, and hamlets along the canal and Illinois river.

"Very truly yours,

"JOHN H. RAUCH."

Dr. C. W. Earle stated that men of his age had not passed through epidemic cholera, as a physician, he could therefore say nothing regarding it from experience, and preferred to hear what our older brethren had to state in this respect. Regarding the differential diagnosis of infantile diseases he could, were it germane to the subject under discussion, add something. Or, were Asiatic cholera present, infantile diseases could be discussed simultaneously. He thought diseases of children, especially the summer bowel difficulties they have, should concern us more at this time than cholera. He would at an early date, if desired, say something as to how a remedy may be devised to diminish the great mortality among this class of our population.

Dr. N. S. Davis was invited by the president to give the history of differential diagnosis, and his treatment of cholera and cholera morbus. He stated that he felt embarrassed to discuss a subject of this kind before the society. As the time for doing so was limited, and he was afraid that he would consume more time than belonged to him, and to do so hastily would prove unsatisfactory to himself, as well as to others. He had studied cholera in epidemic form clinically, in a large degree, since 1849. In the city of New York, where he lived at that time, it prevailed pretty extensively. He remained there until the epidemic subsided, and administered to those afflicted with the disease for twenty-one days and nights consecutively. He has seen more or less of epidemic cholera when it has appeared here since that time. During the fall of that year he removed to Chicago, and we had it here also during the summer of 1850, '51, and '52. In the summer of 1853, Chicago was clear of cholera, and there was no semblance of the disease, but in 1854 it "broke out" again. The first case appeared in the western portion of the city on about the 20th or the 24th day of April. Cases "sprang up" disjointedly in different parts of the city every three, four, five, or six days during the months of May and June, and eight or ten deaths a day occurred during the last days of June (although the newspapers stated to the contrary). He then gave a number of interesting reminiscences, how the authorities quarantined down the Illinois river to prevent the disease entering Chi-

cago from the interior of the State. In 1866, when it again appeared, he pushed his last resources to prevent its becoming epidemic, and quite exhausted his powers of vision to discover the power of its contagion. He kept the alvine discharges of patients who had the disease for one or two weeks to discover this, and had in his possession now drawings that he made at that time. So far as the disease is concerned there are a half dozen different varieties of germs; they are accompaniments of the disease. And every variety of disease having a degenerative accumulation of natural cells in the tissues, is invested or accompanied by some form of germs. Whenever there is a deteriorative change of living organic matter, or where dissolution is reached, no matter what the disease is, germs are present, not as causes but as accompaniments. They are uniform, and are accompaniments of the effects of the disease. Some writers may produce the disease by inoculation, but he had not known of this being done. In 1848 he recalled two instances of steamships crossing the ocean; they came in about the same length of time as vessels do now; perhaps, though, it required a day or two longer. But cholera does not come with the tide of travel, although it spread over Europe during that year. One of the vessels was destined for New Orleans, the other bound for New York. The latter was quarantined, as two or three emigrants on board were attacked with the disease. They were taken on shore to a boarding or lodging house on Washington street that contained 400 others. Yet cholera did not spread; it "died out" at quarantine. This occurred in either November or December of that year. The vessel bound for New Orleans arrived there, and cases of the disease appeared on board the ship ere she got within 500 miles of New Orleans. The vessel was not quarantined, and the result was cholera developed furiously in that city. In the spring of 1849 it "started up" again in New York, and spread over the country, although vigorous measures were pursued to "stamp it out." This cannot be done, however, and we must look to see it "die out." It will not prevail for more than one or two seasons in succession as a rule, although in this city, during the years 1849, '50, '51, and '52, proved an exception. Regarding the theory of germs and propagation of the disease, during the year 1854 no one disinfected the discharges. There were no cess-pools but what some of the dejecta were emptied in, and these, too, were not disinfected. Yet cholera did not appear in Chicago again until 1866. Of course, though we should exercise vigilant sanitary precautions, for the disease cannot flourish in an elevated position where there is an abundance of fresh air and pure water (the Katskill mountains were mentioned as a point of illustration, where the disease cannot obtain a foothold), yet the disease was prevalent in Europe in 1865. We anticipated its coming to this country and visiting this city the year following, and many of the timid ones made their arrangements for getting out of the city early, and he advised any physician who was afraid of getting it, or if he believed it to be contagious, to remove when it makes its appearance. It began during the latter part of June, but not very vigorously. A few deaths occurred every day during



this month and throughout July. In August it rained nearly every day, and excessive moisture does not help to increase its virulency or prevalence. The result was cholera entirely disappeared. The agriculturists held their annual State fair during the first week in September. Farmers arrived and stopped at hotels where but a few weeks previously people died of cholera. The farmers returned home safely in good health, and did not take the disease. During the last two weeks of September the weather became very sultry and hot. The moisture and water of the August rains were dried, when cholera rapidly "sprang up" again, and one thousand deaths occurred in the following three weeks, which extended over into October. There was an unusual sharp prevalence of it. Then frost appeared, and a little later snow fell, and in another week no trace of the disease was left. Three things are essential to produce cholera where they coöperate together: 1. High temperature. 2. A location where the soil is in a damp condition favorable for decomposition of organic matter. 3. Where an organism is in that soil.

#### Prevention.

Briefly then, antiseptic measures, entire cleanliness, and in this we need not look much beyond our own location to prevent it, alluvial soil must be looked to, fumigation and hygienic rules must be regarded. Relative to the differentiation of epidemic cholera and cholera morbus, we will hastily give the more prominent symptoms of each. In the latter disease the urine is seldom or never suppressed, there are more griping pains in cholera morbus, then too there is no preceding stage of diarrhœa, while in epidemic cholera, there is almost always a premonitory stage of diarrhœa lasting from four or five hours to as many days. It is a painless diarrhœa. There is lassitude, and there is sometimes a "crawly feeling" that "steals" over the patient, or a sense of numbness comes on, and there supervenes a strange prickly feeling. There are also noises in the head, or a stunning feeling about the head and ears, until he will have an attack of purging, and pour out a vast quantity in the chamber; the blood recedes from the surface. The patient attempts to lie down, but he is suddenly disturbed from this position by an attack of vomiting. He vomits and purges an unusual quantity of serum, and this process he repeats every ten or twenty minutes. The chamber may be half filled at one attack of purging or from one discharge. It is rice-colored or turbid in color, little flocculi appear in it, also mucus and epithelium, which settles to the bottom. The patient rapidly withers, his lips become leadened, in three or four more evacuations, he is seized with cramps, they appear first in the calves, then in the muscles of the cornea, the voice becomes husky and hoarse, he can scarcely speak above a whisper, there is no bile in the discharges, there is lowering of the temperature, the breath is cool. Sometimes cholera morbus will put on this aspect, and, again, a few cases of true cholera will differ from the above hurried description. A patient may be so violently attacked that in a few minutes he becomes faint or goes at once into collapse, or in from three to six hours collapse will come on, with

perhaps only one evacuation of the bowels. The speaker then cited a typical case of this form of cholera, namely, that of a Norwegian laboring man. It is as if the vital forces are paralyzed at once.

#### Indications for Treatment.

If it were true that these little microbes caused the disease, and acids would kill them, then the first thing to do is to get acid into your patient, and kill the germs. Give them some form of the mineral acids, as the dilute sulphuric, sulphurous, or the hydrobromic acid; but we must not depend wholly on these to arrest the progress of the disease, we must immediately put the patient at rest. The mucous membrane in its entirety is an absorbing surface; in its first and middle portions, its action is changed or converted into a most rapid exudation. The surface of the stomach is exomose in its action; there is relaxation of the cutaneous surface that needs to be attended to; the blood undergoes a rapid change as a result of the disease; the saline elements and watery portion of the blood are washed away; the blood becomes thickened, so much so, oftentimes, that it will not circulate; molecular change and heat cease. The vaso-motor nerves may be the first to take on this primary change in the disease. We must adopt measures to stop the inverted action of the mucous membrane. How are we to do this best? The speaker had tried every rational method of treatment that he could devise in former years, although he never had tried horse-radish or vaccination or gunpowder, as had been mentioned in the paper. He had cupped the spine, applied sinapisms over the epigastrium and spine, applied dry warmth and frictions, had seen patients placed in the ice-pack, and rolled in blankets wrung out of ice-cold water, he had applied salt and ice about the spine, he had used emetics of salt and mustard, had bled them by opening a vein when the blood would run, and this he had seen afford temporary relief. In a few instances emetics of salt and mustard he has seen help a patient. *The most successful method, however, is to diminish the excitability of the mucous membrane, lessen the tendency to wasting of the saline elements, and promote the action of the kidneys.* And first of all, the cholera patient should be placed entirely at rest in the horizontal position; then apply dry warmth to his limbs; do not apply friction, and if cramps appear, gently seize the muscles with the hands and compress them. Apply a large sinapism of mustard to the epigastrium, and when it becomes too hot, change it to a point opposite (on his back), or between the shoulders.

During the years 1866 and 1873, he gave internally the following powder: Calomel, gr. j., morph. sulph., gr.  $\frac{1}{2}$ , sacchar. alba, gr. v. After each attack of vomiting, do not wait to give it at stated intervals, for to do so it might be given the very moment he vomits again. Mix the powder with a spoonful of ice-water, then give a small piece of ice to satisfy the patient. Serve the rectum in the same way with an anodyne and alterative remedy by giving a powder composed of plumbi acetat, gr. x, morphæ sulph., gr. ss, in two ounces of cold water. This is to be used as an enema, and should be retained by assisting the patient to do so. The latter part of this treatment he has pursued since

1849. In addition to the internal remedies, he gives

R. Carbolic acid,	gr. $\frac{1}{4}$ .
Tr. opii camph.,	$\text{ʒss}-\frac{1}{2}$ .
Tr. gelseminim,	gtt. v.,

in a little glycerine and water alternately with the powder. These are very beneficial remedies to overcome the vomiting and assist the urinary secretion. Give other remedies also to favor secretion of urine, such as the diluent drinks. We should build them up and prevent collapse. Should this ensue, we must replenish their forces by giving any of the broths, such as beef tea or chicken soup, or rice boiled with meat, well seasoned with common salt to make up for the waste of the saline portion of the blood that has been washed away. Give also strong coffee in teaspoonful amounts at first every few minutes, and gradually increase this amount to act on the vaso-motor system; repeat it as often as every fifteen minutes, increasing the quantity steadily as it could be retained. His skin should also receive especial at-

tention in addition to the above remedies, that are to be applied externally. Give a hypodermic injection of atropine to act on the periphery, combined perhaps with minute doses of strychnia, which may be introduced anywhere over the surface. Do not use ergotin, for this is depressing. One writer recently claims to introduce an equal mixture of whisky and water in the areolar tissues of the thigh until reaction comes on, will arrest further progress of the disease. I would suggest instead of this, that it consist of a saline water injection instead, to be used in the same manner. Such though is the outline in substance of the treatment to replenish most cases, and if persistently and carefully carried out, will in twenty-four hours bring about a fair chance in most cases for the patient to be on a good footing.

The Society thanked the Doctor for his address, and it was resolved to continue the discussion of the treatment of cholera at the meeting two weeks hence.

LISTON H. MONTGOMERY, M. D.,  
Secretary.

## EDITORIAL DEPARTMENT.

### PERISCOPE.

#### The Arrest of Hemorrhage.

In the *Glasgow Med. Jour.*, August, 1884, Dr. J. Stuart Nairne publishes the following practical remarks:

"I have been present at operations where one might truly say that it was only by the grace of God the patient did not die on the table from hemorrhage, as there were neither right nor ready means at hand for controlling it; where there was nothing better for tying the stump of a pedicle than a piece of whip-cord tightened by the hands; and any one who has seen this method of securing a thick stump, will not be very ready to try it. By no amount of manual pulling could you safely compress a vascular stump, say from an inch upwards in diameter. The vessels in the centre would be sure to bleed sooner or later, and I have seen one fatal case from this cause. In this case the operator had neither clamp nor compressing forceps, nor wire ligature to be screwed up; nor even the loop of an *ecraseur* to control the hemorrhage. In one public institution I saw a death on the table. The uterus was amputated at the cervix, while the stump was grasped by the hand in order to tie a ligature to it. Before this could be done, the patient was dead. It is right to state that this death was attributed to shock, and not to the loss of blood. If this was a death from shock, it is the only sudden death I have ever seen from that cause. I do not believe that death can ever possibly occur from that cause—viz., shock—unless some of the vital nerve centres be directly implicated, always taking for granted, however, that the patient is properly under the influence of an anæsthetic. Under these circumstances, and also

when no anæsthetic is used, death may occur from the most trivial shock. You will remember a recent case when a highly respected surgeon of this city, examining a patient with inguinal hernia, found it suddenly slip from his fingers, and on announcing this pleasant fact abruptly to the patient, she immediately died. This was a death from pure nervous shock, and could not possibly have occurred under an anæsthetic. I do not believe a death ever occurred under an anæsthetic, unless from the anæsthetic itself or from some kind of blunder in the operation. Some years ago I assisted an operator, a quiet, bold man, now laid in his grave, in the extirpation of some deep-seated glands of the neck on the left side. The pneumogastric of that side was cut; its inhibitory action ceased, and the pulse and respiration rushed at unaccountable speed, bringing death in less than ten minutes. *De mortuis nil nisi bonum.* It was a blunder, we all said so—four of us then, and the two eminent of us since then laid in their graves: and this statement, a truthful little cross elevated over the one's tomb in no spirit of animosity, but as a valuable warning to us who remain. This is the kind of sudden death, then, that occurs under operation—error of judgment in doing, a slip, incapacity to control hemorrhage or surmount difficulties, or extinction of life by the anæsthetic.

"In a case narrated in a recent number of the *British Medical Journal*, Knowsley Thornton, who assisted the operator, passed his hand into the pelvis and held the stump of the uterus, which had been removed, till Koeberle's *serre-neud* was applied. The case recovered; but such a course is not to be imitated. An experienced operator may do almost anything; but no one has the right to place the life of a patient in jeopardy either through temerity or carelessness, far less from a desire to show off his dexterity.

Every drop of blood that you save is a gain to your patient.

"I am sure many of you must remember as well as I do when an operation in our Royal Infirmary resembled, to a large extent, an exhibition of so many artificial fountains; I and my fellow-students have frequently been bespattered with blood as we sat in the benches. I remember an operation for ovariectomy in the Chapel, the old operating theatre of the Glasgow Royal Infirmary. The general circumstances are as fresh and horrible in my mind as yesterday. The incision—the uselessly long incision—into the abdominal parietes was followed instantly by torrents of ovarian fluid and blood, the operator thrusting his hand into the interior of the cyst and breaking up smaller loculi, which discharged themselves in the same way. Everybody and everything around was soaked. *Nous avons change tout cela.*

**Pressure Forceps.**—There need be no such display. Deliberation, quietness, the application of pressure forceps immediately you cut, or, when possible, before you cut, and your operation will be conducted with the greatest cleanliness and the least risk to your patient.

"The ordinary artery forceps are absolutely worthless for the immediate suppression of hemorrhage. You have frequently neither time nor room to throw a ligature over a bleeding vessel in the usual manner; and, as I have seen, at a later stage of the operation the ligature and end of the artery may be cut off by accident. You can never make such a mistake with pressure forceps; for if you have to cut a little beyond or above them, you are bound to know what you are doing; you see the forceps attached, but you may not in your hurry notice the loop of silk or catgut.

"In an operation shortly since, which I had the pleasure of doing for Mr. Gilmour, eleven pairs of these forceps were attached at the same time to various bleeding vessels and surfaces; and I may refer to that gentleman and to Dr. Pollok, who was also present, to say if there could have been more than two ounces of blood lost in an operation that lasted for an hour and ten minutes.

"The use of these forceps is not limited to abdominal surgery; they are far too seldom used in general surgical work. Your President kindly assisted me the other day at an operation in private for amputation above the knee-joint. With the limited use of an elastic tourniquet, and the rapid application of half a dozen pairs of forceps to the bleeding vessels, I think Dr. Park will bear me out in saying that there could not have been lost more than half an ounce of blood. In a long operation, by the time you are ready to tie the vessels you will frequently find the bleeding has ceased, and you will require fewer ligatures than you could have anticipated. It is a little difficult to slip a ligature on a vessel over the points of these pressure forceps, and you may require occasionally to put on an ordinary pair of forceps for this purpose, but very rarely indeed.

"These scissor or pressure forceps are of various sizes and makes, concerning which more particulars a little farther on. Those used by Sir Spencer Wells are admirable instruments; Lawson Tait's form is sharper in the nose, and he claims for them that their point is not so readily

entangled in a ligature; the bulbous extremity which I have put on them, however, prevents any possibility of this happening. Pressure forceps, then, are a perfect *sine qua non* in an abdominal operation. It is important that there should be as little blood lost as possible, and it is also important that as little blood as possible should escape into the abdominal cavity.

#### A Curious Case of Persistent Reflex Spasm of the Diaphragm.

Dr. A. L. Ranney reports this case in the *Medical News*:

A case which I desire to bring before the notice of the profession was lately sent to me by Dr. L. M. Bingham, of Burlington, Vt., for diagnosis and suggestions as to treatment. Her history was as follows:

Miss E. W. Unmarried. Aged forty-four years. Her father died of cancer, complicated with phthisis, at the age of seventy; her mother died of heart disease at the age of thirty-five. She has three sisters living, all of whom are "delicate and of a nervous temperament." Two sisters died of Bright's disease. One niece of the patient had chorea of a severe and persistent type.

As a child, the patient was afflicted with "extreme nervousness," but never had any marked symptoms of chorea. She menstruated at thirteen years, but was irregular until she reached the age of thirty years, since which time the menstrual function has been normal. Insomnia became developed as a marked symptom at the age of twenty years. It has persisted ever since; but with varying degrees of intensity. From youth she has been subject to more or less tremor of the hands, and has lately noticed that excitement markedly increased it. The tremor stops during sleep and does not caused her much inconvenience during the day. Neuralgic pains occasionally shoot into the hands and fingers, and are often experienced in the shoulders, back, and left side.

Four years before the date of my examination, she was attacked with *paroxysms of hiccough*. These have persisted throughout the past four years. The attacks come on in paroxysms which last from ten to sixty minutes. They are often so severe as to cause vertigo and symptoms of asphyxia. *They almost invariably follow movements of the upper extremities.* For that reason all manual efforts have been avoided for some years. The sweeping of a room will throw the patient into a severe paroxysm of hiccough. Sewing is rendered impossible for the same reason. Dressing the hair almost invariably induces an attack. Movements of the head, trunk, or legs seem to exert no influence upon the patient of a similar character.

Of late, neuralgic attacks have become more frequent and severe. The eyes have been affected with neuralgic pains of a severe type, and also the shoulder of the left side.

On examination, no loss of muscular power was detected by me in either hand by means of the dynamometer. The condition of her body in respect to sensations of touch, pain, and temperature was tested and found to be normal. No painful points (the *puncta dolorosa* of Valleix) were

detected over the seat of the neuralgic attacks. Pressure made over the spinous processes of the vertebrae produced no pain *except at one point*. This corresponded to the situation of the fourth, fifth, and sixth cervical segments of the spinal cord. Here the patient suffered marked pain on pressure and the skin was markedly hyperæsthetic. The patient stated, in reply to my interrogations, that this region had been the seat of a continuous "aching sensation" for the past four years. The superficial and deep spinal reflexes were normal. Coördination was performed perfectly in both the upper and lower extremities. The pupils were normal and responded perfectly to light and visual accommodation.

The condition was evidently one of abnormal excitability of the lower cervical segments of the cord, associated with general neurasthenia. The fifth cervical segment gives origin to filaments which enter into the formation of both the brachial plexuses and the phrenic nerves arise from the third and fourth segments as well. The case appears to justify the conclusion (based upon anatomical data), that the activity of the lower cervical segments (necessary to movements of the arms and hands) produced in adjacent segments of the cord an abnormal irritation of the cells associated with the physiological function of the phrenic nerves—hence the diaphragmatic spasm.

The patient was burnt with the benzine cautery apparatus over the cervical and dorsal segments of the cord, and ergot and the bromides were ordered to relieve the local congestion of the cord that probably exists. This treatment had previously been tried for a short time with marked benefit, but had been discontinued when the symptoms exhibited amelioration. The effect of the continued use of the cautery has yet to be determined.

#### Acute Inflammation of Diabetes and Nerve-Influence.

In the course of his address in medicine before the British Medical Association, Dr. William M. Ord said:

In true diabetes, the occurrence of sudden and very acute visceral inflammations is common. It is generally found that, while such complications last, the urinary sugar dwindles, or even disappears. An explanation of this occurrence has been found by some writers in the hypothesis of an increased combustion of sugar as a part of the pyrexial state. But, seeing that such inflammations involve the diversion of a large quantity of blood to the organ affected, I venture to suggest that in such diversion, rather than in a purely hypothetical combustion, may be found the true explanation. Physiological experiment has shown that, when sections of the sympathetic, leading to vaso-motor dilatation of the hepatic vessels alone, has been made, glycosuria has been produced; that, when the section has been made at a point producing, in addition to dilatation of the arteries of the liver, dilatation of the vessels of the intestines, glycosuria has not followed. The inference drawn is to the effect that so much arterial relaxation was produced in the supply of organs neighboring to the liver as to stand in the way of an effective increase in its arterial circula-

tion. I had an opportunity quite recently of testing the probability of this hypothesis. The temperature of a diabetic patient rose suddenly to 104° Fahr. The most careful examination brought out no signs of visceral inflammation during two days; and in the same period the amount of sugar in the urine stood at the figure registered for several weeks before. On the third day, the temperature remaining at the same height, the signs of pneumonia became apparent, and at the same time the urinary sugar diminished very considerably. In my gouty cases, a similar train of phenomena has been several times noted—the sugar diminishing in a very marked degree at the time of the development of acute joint-inflammation, and returning immediately on its subsidence.

In trying to understand the sudden acquirement of a poisonous quality by the milk of an agitated woman, one had found a difficulty of this kind—could mere quantitative variations in the afflux of blood affect the quality of the secretion? Can it be possible that, in the production of the lacteal secretion, may be concerned not merely increased afflux of the materials of the secretion, but also varying afflux of ferments determining its quality; and capable, by reason of either great deficiency or great excess, of seriously perverting its quality? Here is an admitted neurotic dystrophy, the mechanism of which is well worth careful investigation; and from the consideration of glycosuria we may be enabled to glean at least suggestions as to what the mechanism may be.

#### Post-Mortem Examination of a Case in which Removal of the Uterine Appendages for Myoma had been Performed Three Years Before Death.

In the *London Medical Times*, August 2, 1884, Mr. Lawson Tait says:

I have just received from Dr. Saundby a jar containing the uterus of a woman, aged 47, from whom I removed the uterine appendages for a large myoma on June 21, 1881. At that time she was under the joint care of Mr. M. Hallwright and myself, for profuse menorrhagia, accompanied by intense pain. All other efforts having failed to relieve her, her health being completely destroyed and the tumor growing rapidly, I advised the operation. The tumor reached about an inch above the umbilicus, and the upper end of the incision necessary to reach the appendages was almost at that land-mark. Dr. George Fyfe, Dr. Savage, and Mr. Raffles Harmer, were present at the operation. She made an easy recovery, and never lost a drop of blood from the uterus after her convalescence, which was completed within a month. She rapidly gained strength and health, and, as she said upon my frequent visits to her, had neither ache nor ail. She happened to live close to my house, and was therefore frequently exhibited to visitors. She had been seen and examined by Dr. Marion Sims, Dr. Battey, and Dr. T. A. Emmett. Ten days ago she suddenly began to suffer from symptoms of intestinal obstruction, and as this resisted all ordinary measures, I opened her abdomen for the second time last Wednesday, July 23. Dr. P. Sydney Jones, of Sydney, Dr. Vanderwar, of Albany, and Mr. J. W. Taylor were present. I feared, of course, that the obstruction was due to some adhesion of intestine to the stumps of the for-



mer operation, but I am glad to say that my fears had no foundation. I performed enterotomy, but she survived the operation only some fifteen hours. Dr. Saundby made the *post-mortem* examination, and removed the uterus entire. The myoma has shrivelled to the size of a small orange, certainly less than a tenth of its size three years ago, and there is no trace of ovaries, or tubes, or stumps, or ligatures.

## REVIEWS AND BOOK NOTICES.

### NOTES ON CURRENT MEDICAL LITERATURE.

—In a lecture on puerperal fever which we have received from Dr. T. G. Comstock (reprint from *N. Y. Med. Times*), he says of its therapeutics :

The remedies to be named as among those absolutely requisite, that should be within reach, are *aconite, gelsemium, veratrum viride, bryonia mercurius, quinine, opium, digitalis, alcohol, nux vomica, ignatia*, and sometimes *bromide of potash*.

*Refrigeration* as an auxiliary, is proved by experience to be a precious boon, and when carefully understood and rationally applied, will be found equally useful, as when employed in scarlatina, typhus, pneumonia, and pulmonary hemorrhage. Hot fomentations in certain complications are frequently useful, and are to be recommended.

—*Godey's Lady's Book* for September presents special attractions. There are two excellent serials now running, one from the pen of the popular English authoress, Helen Mathers, called "Dreeing of the Weird." "The Story of an Elopement," by Christian Reid, has not so quaint a title, but excites scarcely less interest and admiration. The pretty other articles are not less pleasing to the general reader.

—Dr. I. H. Wood, of Denver, Col., in a reprint before us on phthisis, extols with enthusiasm Denver as a place of resort for consumptives. He writes :

"Here will be found excellent churches, schools, and theatres ; and it is probably the residence of a larger number of recuperated invalids, now able to enjoy life, and take an active part in its duties, than any other city of its size in the world.

"For a winter residence it is unsurpassed, although during the summer the mountains should be resorted to, and if possible consumptives ought to camp out."

—The Proceedings of the Kentucky State Sanitary Council have been issued in pamphlet form. (pp. 60, Louisville). They contain addresses and discussions on sanitary topics, and cannot fail to be a useful aid to the progress of hygienic science in that commonwealth.

### BOOK NOTICES.

**The Natural Dispensatory. Containing the Natural History, Chemistry, Pharmacy, Action, and Uses of Medicines.** By Alfred Stillé, M. D., LL. D., and John M. Maisch, Phar. D. Third edition, pp. 1755. Henry C. Lea's Sons & Co.

This third edition has undergone a close revision, and very extensive additions. Some idea of the latter may be had from the statement in the preface that the additional references in the index are nearly 4,000. The numerous developments in pharmacy and therapeutics which the last few years have witnessed have been carefully collated, and it may safely be said that none of them will be looked for in vain.

In the therapeutical department much consideration has been given to the physiological aspect of the action of drugs, but, as heretofore, the principal stress has been laid on their clinical features. In this respect we are glad to observe that a sounder spirit is manifested than in some modern works on pharmaceutical and therapeutic agents.

We can truthfully say that the National Dispensatory deserves its title, and is sure long to maintain its high position with the profession.

**Fifth Annual Report of the Illinois State Board of Health.** Springfield, 1883. 8vo., pp. 633.

This thick volume of nigh 650 pp. in small print exhibits a vast amount of labor, all or nearly all of which is sure to be remunerative to the great and enlightened state which ordered it. Few commonwealths understand the immense money value of the protection of public health. Illinois does, and within the last few months one of its greatest industries, its exportation of beef, has been saved by the excellent report made by eastern inspectors as to the enlightened care exercised over the method of preparing food of this kind.

Of the matters of general interest in this volume, we may name the small-pox epidemic of 1883, which is treated very fully in a space of 310 pages. Some excellent remarks are made in this connection in reference to the inspection of emigrants on steamship lines. There is also a full report of the medical educational institutions in the United States, their location and standing. The vital statistics are well arranged, and meteorological tables are added. The proceedings of the Sanitary Council of the Mississippi Valley are also inserted in this volume.

—Menthol has been used with success for ringworm, both in the form of a solution and pomade.

THE  
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 A WEEKLY JOURNAL,  
 ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,  
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#### THE CONTROL OF PATHOLOGICAL RESEARCH BY CLINICAL OBSERVATION.

Apropos of our recent remarks on scientific vs. practical medicine, we are gratified to note that the President of the British Medical Association chose the title of our editorial as the subject of his address at the last meeting of the association.

He very truly says that the study of minute organisms, which is all the rage to-day, is limited to comparatively few men, for the very good reason that the mass of the profession are too much occupied in earning their livelihoods to be able to give any time to the study of that which brings to them no pecuniary recompense. But at the same time he calls our attention to the fact that even if it is ultimately conclusively demonstrated that micro-organisms or germs are the etiological factors of disease, we must still recognize the fact that in order that they may grow and multiply, it is absolutely necessary that they should be deposited on congenial soil—that some certain conditions of the organism must exist, else they cannot work mischief. And he says:

“This predisposition may be either a general one, expressed by a proclivity in some countries, or in certain races, or in particular temperaments; or it may have been acquired by the individual either at a certain period of life, or under the influence of a variety of causes in his diet, occupation, or surroundings. Now, it is precisely with reference to these points that we can get most light—I had almost said the only light—from the general experience of the profession. A great deal of medical literature is founded on hospital practice, which, valuable as it is, wants the element of time. The floating population of hospitals passes rapidly from observation; and it is only from the medical men who have known patients for years, and often the stock from which they come, that we can get information which necessarily presupposes continuous observation spread over long periods.

“It is in respect to questions of this kind, which are so clearly within the scope of every practitioner of medicine, that I look for the best results from the labors of the Collective Investigation Committee, which, I have no doubt, will prove one of the most valuable of the agencies for good in this Association; and I am not without hope of a still larger and more ambitious effort, which will embrace not only this, but all civilized coun-

tries, in its operation; and that we may have an International Collective Investigation of Disease. From such an organization we could obtain an immense amount of information on the subject of climatic and telluric influences, and on the question of racial proclivities to disease, as well as on the important subject of diathesis.

"The subject of the proclivities of different races to disease, is one of great interest, and has been but little investigated. The facilities which the vast colonial empire of England offers for observation to medical officers of the public services, have enabled them to see much of disease in different countries of the world; and, no doubt, there is a good deal of information entombed in the *Army and Navy Medical Reports*; but we have but little definite knowledge. That the negro race enjoys a comparative immunity from yellow fever, and that even a slight admixture of negro blood brings with it a certain degree of protection from this malady, seems well ascertained. The comparative freedom of the same race from stone, and, on the other hand, their marked liability to elephantiasis, and to tetanus, are clearly made out. Again, there is reason to believe that different branches of the Aryan family present some peculiarities in respect of liabilities to morbid influence. In France, where, from the requirements of military service, statistics with respect to some classes of affections are easily accessible, it has been found that, in the provinces where there is most Teutonic blood, there is a notably greater number of exemptions from service, owing to varicose veins and hernia, than in those in which the inhabitants are of Celtic origin. On the other hand, it is considered by some that the Celtic peoples do not bear surgical operations so well. When Velpeau was reproached with the great mortality after operations in Parisian, as compared with English hospitals, he is reported to have replied that the flesh of a Frenchman was not the flesh of an Englishman."

These remarks suggest to us a great topic for observation. Within the extensive boundaries of our country are to be found all races and nationalities. It would prove most interesting investigation were each physician to keep a careful clinical history of each of his patients, and at the end of each year, reviewing his records, note carefully and publish all that occurred to him in reference to this question of predisposition.

—The International Medical Congress will hold its next meeting in Washington, in 1887.

#### THE INTRODUCTION OF P. DEMIC DISEASE FROM EUROPE.

With the constant increase in intercourse between Europe and this country, the perils which we run from an epidemic that prevails there are annually increased. The more important, therefore, becomes the Trans-Atlantic Marine Medical Service, and the more rigid should be the accountability of the steamship lines to employ competent medical officers.

It has been alleged that a good deal is wanting in this respect. It has been said that the companies, out of a mistaken policy of niggardliness, employ inexperienced and incompetent surgeons, because they are not willing to pay enough, or do not provide becoming quarters for those of proper experience and standing.

There is undoubtedly some truth in these charges, in spite of the vigorous denials of the companies themselves. Proof of it is furnished by the last Report of the Illinois State Board of Health, in the pages devoted to the Immigrant Inspection Service.

It may be considered certain that if a ship surgeon does not take care to prevent the introduction of small-pox by proper vaccination and inspection, he will not give due attention to anything else. These reports show conclusively that there was a great deal of negligence on this point in many lines. Many immigrants landed without having undergone vaccination, many reported no inspection at all, some came in with symptoms of small-pox developing on them. Some surgeons gave no cards of vaccination; in other cases, the cards bore no dates. On one steamer the inspector found 71 persons wholly unvaccinated, and this during a small-pox epidemic.

We should be justified in republishing the names of those companies and ships which thus neglected their bounden duty to the public; but we prefer to refer our readers to the above-mentioned report, where the details are given in full, the names of the surgeons and all (pp. 355-360). It is more agreeable to us to mention those lines whose surgeons had performed their duties in the most creditable manner. These were especially

the vessels of the North German Lloyd Line, and those of the White Star Line, the former to Hamburg and Bremen, the latter to Liverpool. It is to be hoped that equally thorough work will be performed on all the lines.

#### THE CONSEQUENCES OF THE EXTIRPATION OF THE SPLEEN.

The surgical removal of the spleen under certain conditions is to-day considered a legitimate operation. After Tizzoni had insisted upon the development of small spleen-like tumors on the omentum of animals deprived of their spleen, and after he had expressed the opinion that these new growths performed the functions of the lost organ, Prof. Mosler (*Deutsch. Med. Wochenschrift*, 22, '84) took the subject in hand, and examined into the consequences of the removal of the spleen, with the following result:

The small tumors mentioned by Tizzoni are, according to Mosler, telangiectatic-hemorrhagic lymphomas, developing from the areolar tissue of the serosa, which is rich in blood-vessels. A direct connection between the want of a spleen and these new growths does not exist.

The following phenomena were noted as the consequences in thirty cases of extirpation of the spleen practiced by Mosler.

The spleen is not essential to the life of animals.

After extirpation or atrophy of the spleen artificially produced, its function is taken up by the other lymphatic organs. In this the marrow of the bones seems to play an important part, as after the removal of the organ great alterations, similar to those observed in leucemia, are met with for a long time. Hyperplasia of the lymphatic glands is not often noted.

The vicarious action of the other lymphatic organs seems to depend upon external influences, and is not always complete in animals deprived of their spleen, for during the first months after the removal of the organ, the blood shows an abnormal composition. This fact proves that the spleen participates in some way in the manufacture of the blood, especially in the new formation of white and red corpuscles.

The extirpation of the spleen exerts no influence on stomach and pancreas digestion, the greatly increased appetite of animals wanting their spleen being no proof of the contrary.

#### THE EFFECTS OF HIGH TEMPERATURE.

The remarkably exhaustive effects of a high temperature is familiar to all who have lived in tropical climates, or who have passed "the heated term" in one of our great cities. It is most perceptible on infants and the very aged. In India, the children of European settlers rarely live to adult life, and when they do, it is with relaxed bodies and inert minds.

Some interesting observations made with a view to ascertain the effect of high temperature on physiological function are reported by Dr. C. H. H. Hall, in the *Proceedings of the Naval Society*. His subjects were the water-tenders in the fire-rooms of a steamer. They are exposed to an artificial temperature of about 180° F., which is little more than the natural temperature of Southern India, where the thermometer in the sun frequently reaches 170°.

The disturbance was especially noticed on the heart's action. The cutaneous veins became turgid with blood, the pulse rose to as high as 180 per minute, and the temperature under the tongue to 103.6°. The respiration was affected only secondarily, but finally increased from 18 to 42 per minute. These striking results show how violent is the action of a heated temperature on organic function, and explain its highly injurious results in feeble conditions.

#### ON HYPNOTISM.

In many persons we succeed by stroking any part of the body in producing anæsthesia or rigidity in that part, without influencing the cerebral functions. Dr. Schleicher has investigated this "local" hypnotism (*Annales de la Soc. de Méd. d'Anvers*, 1884), and arrived at the following conclusions:

Any excitation, of medium strength or weak, repeatedly applied in a uniform and regular manner to any portion of the surface, causes insensi-



bility of that portion. According to the individual this effect sets in within a few seconds or minutes. Frequent repetition within a short time of the same manipulation makes the skin sensitive in such a degree to its influence as to produce its effect by one single stroke. Any new excitation of a different kind at once counteracts the effect of the other, and irregular stroking or rubbing forms one of these. The same peculiar phenomena may be produced in the organs of special sense. So complete amaurosis may be induced by repeated impressions on the bulbus, taste abolished by striking the tongue, smell arrested by repeated uniform air douches, diminution of the sense of hearing by repeated small strokes on the mastoid process. These effects disappear spontaneously within a few moments.

Any acute excitation besides may cause a contraction of the muscles lying below the surface to which the excitation was applied, and the same phenomenon follows direct irritation of muscles, sinews, and nerves. In the latter case the contraction affects the whole region provided by the nerve. The author finds in these phenomena a similarity between hysteria and hypnotism, and finishes his article with a speculative theory, which it is not necessary to translate.

## NOTES AND COMMENTS.

### Rheumatoid Arthritis.

Dr. Dyce Duckworth, in opening a discussion on this subject before the late meeting of the British Medical Association, said that by rheumatoid arthritis he means an essentially chronic form of joint-disease, affecting both small and large, one or many, articulations. It may begin insidiously, with pain and swelling gradually increasing, or it may begin by more acute local symptoms. The tissues of the joint are affected by a chronic, and often progressive, inflammation, beginning first in the synovial membrane, affecting next the articular cartilage, and this, perhaps, in most cases more severely than any other texture; then the ligamentous structures; and, lastly, the ends of the bones.

While not prepared to state positively, yet he believes that rheumatoid arthritis is distinct from, and is not evolved from, a previous rheumatic

attack, since evidences of past rheumatic fever can be elicited only in a small proportion of cases, neither does he believe that it is a form of gout, considering that so far as we have gone we have established a place for rheumatoid arthritis outside rheumatic manifestations, and outside gouty disease; but he also holds that the three diseases can be correlated. With reference to treatment he says: "Whatever is good for rheumatic manifestations anywhere is, I believe, good for chronic rheumatic arthritis. The principles of treatment must vary somewhat with the exciting and determining causes in each case. Attention must be paid to the presence of any cross-taint. Little good will be gained till a better condition of general nutrition and of the nervous system is secured. All causes of exhaustion and depression must be removed. Hence, in addition to good and varied dietary, including free use of foods containing sulphur, such as onions, cruciferous vegetables, and especially mustard, a sheltered, dry, and somewhat high locality should be sought. For drugs, I like best cod-liver oil, iodide of potassium, pushed to ten or fifteen grain doses, iron, arsenic, and sulphur. Lemon-juice is well thought of, I am told, in Dublin. Counter-irritation in the early stages is much neglected, and smart blistering, Corrigan's thermic hammer, and the actual cautery, will save much subsequent trouble. Proper employment of hot sulphurous waters and of Turkish baths is, without doubt, of the highest value. For those who can afford it, I believe that a residence for some years in tropical and semi-tropical climates will often avail to prevent incurable crippling, and to arrest the disease in an early stage. I attach high importance to early treatment, exercise of the joints, and a vigorous resistance to incipient deformities. The salicylates are valuable for the worst pains at the outset, while opium and the bromides do most for the weariness of those in the advanced stage."

### Imperforate Hymen—Operation.

Dr. H. E. Aust Lawrence reports this case in the *Brit. Med. Jour.*, May 3, 1884:

E. A., aged 14, was admitted to hospital on July 19, 1883, suffering from retention of menses, due to imperforate hymen. She had experienced periodical feelings of discomfort for three or four months previously, but not to such an extent as to cause her to complain, until July 13th, when severe pains were felt in the hypogastrium. The hymen was found to be imperforate and bulging, and the uterus could be distinctly felt as a hard, rounded tumour, reaching one inch above the

pubes. As the symptoms were urgent, it was decided to operate at once under the carbolic spray. The urine was drawn off, a fine trocar was pushed through the hymen, and the thick menstrual secretion allowed to drain very slowly off into a basin, placed to receive it. After some time, a piece of drainage-tube was placed in the opening, and the orifice of the vagina and the neighboring parts were covered over with a pad soaked in a solution of carbolic acid in glycerine (1 in 20); and the parts were well packed with iodoform-wool.

The dressings were changed and the urine drawn off night and morning, under the spray of carbolic acid. The bowels were kept confined for three days by opium, and then relieved by an enema; the dressings still being kept in place. The drainage-tube was taken out night and morning, and washed and replaced.

On July 26th, the discharge having ceased, the patient was placed on the operating table, and the orifice of the vagina was enlarged sufficiently to allow any discharges free exit for the future; warm vaginal injections of Condy's fluid were now used, and a plug of carbolized lint kept in the vagina for a few days, when the patient went home perfectly well, and has since menstruated normally.

*Remarks.*—When we consider that a large proportion of deaths from this very simple operation have been due to septicæmia, we can realize the value of treating them antiseptically. During the draining off of the menstrual secretion, air rushed in and out during each respiration; but as it had to pass through the spray, and became aseptic, no harm resulted. As it is impossible to prevent the access of air, our object must be to render it harmless, and with proper care there is no reason why perfect antiseptic precautions may not be taken. In my patient's case there was no rise in the temperature, and no bad odor with the discharges. I believe the best way to treat these cases is, to make a very small opening in the hymen, so that the fluid may drain off very slowly; and as long as there is any discharge, to maintain full antiseptic precautions.

#### Hypnotism.

The *Lancet*, April 26, 1884, says that the curious phenomena collectively designated by the term "hypnotism" have frequently been the subject of popular attention, more especially under the mysterious names of Braidism, Animal Magnetism, and Electro-biology. Hypnotism in a simple form is, as our readers very well know, a very old story.

More than two hundred years ago the possibility of "enchanting" a hen by drawing a line before its eyes with a piece of chalk was well known, and was demonstrated to an awe-struck audience by the Jesuit priest, Anathesius Kircher. Possibly, on account of its supposed association with magic, little notice was taken of this remarkable phenomenon until about one hundred years ago, when a Swiss, Anton Mesmer, brought the subject into notoriety in France and applied it to man. In the earlier half of the present century, Mr. Braid, of Manchester, examined the matter with scientific care, and tried its curative efficacy on his patients in England; but his views met with disfavor, and the question was not taken up by the scientific or by the medical world until comparatively recent times, when a number of physiologists attempted to investigate it. Dr. Gerald Yeo, Professor of Physiology at King's College, has recently devoted some attention to the subject. We may briefly summarize the conclusions at which he has so far arrived. It is believed that the corpuscles of the grey matter of the nervous centres are called into activity by special nervous influences, which, like those affecting the muscular and glandular tissues, are associated with changes in nutrition. These nerve-regulating centres are constantly kept alive to the state of the various parts of the body, and accordingly affect the nerve-mechanisms belonging to each. When several of the more influential textures are fatigued, the entire frame is made to repose (sleep). In sleep a variety of mental and muscular acts may be performed, if certain tissues or organs remain in a state of activity (sommnambulism). Without sleep, in the ordinary sense, the nervous "governors" of certain organs and parts may be thrown out of gear by notice of a special condition of the organ arriving at its nerve-regulating centre. The impulses indicating this condition (fatigue) may be counterfeited by certain variations in quantity or quality of ordinary stimulation. When local psychical arrests are thus produced without real fatigue of the organs, the surplus energy, arriving at the excito-neural centres, sets up an excessive action of some groups of corpuscles, and thus certain faculties appear exalted in acuteness.

#### Methods of Therapeutic Research.

This is the title of the address at the opening of the section of Pharmacology and Therapeutics of the Brit. Med. Ass., by Dr. T. J. MacLagan, in the course of which, speaking of our ability to cope with disease germs in the body, he says:

There remains the other possibility—the de-

struction of the organism in the system. This, too, is a hopeful field of research, and it is open to us. It has, indeed, been already entered on, and a new group of remedies has been suggested and given a local status as therapeutic agents under the name of germicides. Our knowledge of these agencies is at present very limited; but we may reasonably hope that in time, as we gain in our knowledge of individual germs and their conditions of life, we may also learn how to destroy them in the system. There are some, and there may be many, germicides which, while fatal to germs, are not injurious to the human body. If we could find one which was fatal to the germ of typhoid fever, but which could be taken with impunity by man, that germicide would arrest the course of typhoid fever, if given sufficiently early, before the local lesion had made much headway; and so with diphtheria, scarlatina, and all the diseases to which the germ-theory applies.

As each germ has its own special life-history, its own peculiar conditions of life, under which alone it can flourish, and its own special action on the system, it is probable, too, that each will have its own special destructive agency. An agency which destroyed the typhoid germ might have no action on that of typhus or that of scarlatina.

You are all aware that of late years much evidence has been adduced to show that the poison of the malarial fevers is an organism which is propagated in the system. It is probably by its destructive action on this organism that quinine (a recognized germicide) exercises its curative action in intermittent and remittent fevers. I believe, and have elsewhere given my reasons for my belief, that it is the same with rheumatic fever and the salicyl compounds—that the poison is malarial, and that these agencies (also recognized germicides) owe their remarkable effects in that disease to their destructive action on that poison.

Be that as it may, the recognition of the existence of such agencies as germicides, and the possibility of dealing with diseased processes, and actually curing disease, by agencies which do not necessarily have any action on the system, which act, not on the sufferer, but on that which makes him suffer—the recognition of such a possibility marks an epoch in therapeutics, and opens up to us a vast and interesting field of research, on which I hope we shall not be slow to enter, and from which great results may not unreasonably be looked for.

#### Cysts of Female Uretera.

The *Brit. Med. Jour.*, May 3, 1884, says:

The presence of a small cyst, projecting from the anterior wall of the vagina, and lying immediately behind the urethra, has often been detected in patients, complaining of symptoms attributed by themselves to uterine displacements. In the last number of the *Journal* reference was made (p. 827) to the researches of Dr. Max Schüller, who differs in opinion from Skene, and Dr. Kocks, of Bonn, believing that a pair of ducts situated one on each side of the female urethra, and opening at the posterior border of the meatus, close to each other, are purely gland-ducts, and not relics of the Wolffian ducts. Dr. Kocks, however, in the *Archiv. für Gynäkologie*, describes the same ducts, and the occasional discharge which issues from them; he brings forward very good reasons for believing that the canals are the termination of Gaertner's ducts, the excretory canals of the Wolffian body, which is reduced in the adult female to the parovarium. When the orifice of one of these canals becomes closed, the canal itself might readily become cystic, many of the cysts that are common in other parts of the body being formed in this manner. The evidence of the Wolffian origin of these canals is not very strongly supported by teratological evidence; for though in many mammals the ducts of Gaertner open normally close to the urethra, only two cases of persistence of the ducts appear to have been seen in the human female. In one case two canals passed from the ovary downwards, opening close to the clitoris. This would support Dr. Kocks' opinion, but the case was reported by Realdus Columbus in 1559, though his absence of bias, due to ignorance of a theory unknown in his day, makes his description from certain points of view more trustworthy. In the second case, where the uterus was bicornute, a single canal ran downwards in the outer wall of the right cornu, passed down to the lower end of the incomplete vaginal septum, and then turned up, opening close to the os uteri. Professor Morrison Watson has described these cases in the *Journal of Anatomy and Physiology*, vol. xiv. More researches are required before it can be made certain that the canals made by Dr. Kocks are constant.

#### Urinary Paraplegia.

Dr. William M. Ord (in his address on Medicine before the British Medical Association) says: "In relation with the idea that irritation is set up in joints by irritation reflected from viscera, I am tempted to point to the so-called reflex or urinary

paraplegia as illustrating, possibly, a torpor set up in the nerve-cells of the cord, instead of an irritation dependent on centripetal irritation coming from viscera. The name reflex paraplegia, given by Brown-Séquard, has been of late replaced by a safer term—urinary paraplegia. But, whichever name we use, we recognize that an urethral irritation, most commonly dependent on a stricture, is so joined with paralysis or paresis of the lower limbs as to make it probable that the stricture is a cause of which the paraplegia is the effect. The objection—a just one—to the application of the term “reflex” lies in the fact that the paralysis can sometimes be traced to myelitis, in the lower part of the cord, sometimes to neuritis. But, in a certain number of cases, no lesion of cord or nerves has been detected, and to such cases, where the paraplegia and the urethral irritation were the only coexistences, the term reflex might be applied. I do not speak here of other reflex paraplegias. I merely wish to indicate the possibility of some such nerve-relations existing between the urethral surface of man and the joints, between the uterine surface of woman and the joints, carried on by the mediation of the nerves and cord, and to compare them with such relation as we have been treating of as probably existing between the joints and muscles through the cord.”

#### The Relations of Physiology and Pathology.

To the mind of every thinking man, these two branches of our science hold a most intimate relationship; hence, it is gratifying to note that Dr. W. S. Greenfield chose this for the subject of his address at the opening of the section of Physiology and Pathology at the recent meeting of the British Medical Association. He very truly says: “Indeed, in some aspects, there is so much in common between the two, that there is a sort of debatable ground, which may be claimed by either physiologist or pathologist as his proper field of research. Nay, more, there are those who claim for the physiologist as his proper sphere the investigation of all phenomena of animal life, whether normally or abnormally performed. Nor are there wanting those who assert that, since the pathologist deals with those phenomena under the most varied conditions, and since what we call health is but an accidental balance of function and structure, constantly undergoing alternations and perturbations throughout natural life, he is the most capable of deciding how far structure is essential to function, and under what conditions function may be performed. But such one-sided

views only serve to show that there can be no absolute severance, nor any but an artificial barrier or boundary-line, between physiology and pathology.”

#### Vaccination with Old Lymph.

As of interest, in so far as it adds some information to the question of the efficacy of old vaccine lymph, we note that Dr. Charles F. Rideal thus writes to the *Lancet*, Aug. 2, 1884:

A short time ago I had the opportunity of testing the efficacy of some lymph collected as far back as February, 1854, by the late Mr. Robert Ceely, of Aylesbury. The contents of six hermetically sealed tubes were tried on six individuals—members of different families—and all of whom have since been successfully revaccinated with recent lymph, with the result that in every case the lymph proved itself perfectly inert. I may say that, contrary to my expectation, the lymph was in a fluid state, and had apparently lost much of its specific gravity, for it was (for vaccine lymph) particularly thin and watery. I regret that I did not carefully examine it microscopically, and that I do not possess any more.

#### Osmic Acid in Epilepsy.

The employment of osmic acid in epilepsy suggested itself to M. Wildermuth from the value of the drug in cases of neuralgia. At first the acid was used, but later an osmiote of potassium. The medicament was administered as pilules, each containing one milligramme of the active substance. The maximum daily dose employed was fifteen pilules, or fifteen milligrammes. Thirteen patients, the subjects of confirmed epilepsy, were under observation. The remedy was first combined with bromide of potassium, but this method was not followed by good results. Under the sole influence of the osmiote the number of attacks was steadily diminished, as compared with their frequency on expectant treatment. In only one instance, however, was complete immunity conferred.

#### Fæcal Umbilical Fistula.

The *London Med. Times*, August 2, 1884, reports two cases of this chronic affection, and in each instance a cure was permanently established. The treatment consisted in thoroughly clearing out the alimentary canal by purgative and enema, and then in keeping it in a state of absolute rest by the continuous administration of small doses of opium. At the same time cod-liver oil was prescribed, and the wound was left undisturbed under a pad of dry wool.



## CORRESPONDENCE.

## A Curious Diet in Texas.

EDS. MED. AND SURG. REPORTER:—

In the REPORTER of August 16th, is an article from the pen of C. C. Vanderbeck, M. D., Ph. D., etc., etc., having the title "A Curious Diet in Texas." After discoursing somewhat at length on the diet of various people, among others, the Esquimaux, Aborigines, Germans, the Chinese, Hottentots, Japanese, and Dirt Eaters—some of whom the learned gentleman informs us eat skunks, lizards, snakes and offal or excrement, *et id omne genus*, he adds: "But I write more especially to call attention to a custom in the far south of our country, particularly in Texas. There it is a common practice for the mothers to chew the food for their children, *regurgitate* and spit it out, and then feed it to them. These people are firmly set in their ways, and any remonstrance is likely to be indignantly opposed. *The bitch will often throw up her food, and then feed the vomit to her young; but doubtless many of my readers imagine in our own land, our citizens could not practice a similar custom.* Snakes and snails, rats and cats, toads and spiders, are a luxury in comparison with such diet. We scorn the diet of Australians, Zulus and Barbarians; but behold, within the jurisdiction of the Stars and Stripes, a people feed on vomit and chewed food." The italics are all mine. Now, sir, I have no desire to appear in print, but I wish emphatically and flatly to contradict the foregoing statement, and to denounce it as a vile slander upon as intelligent and cleanly a people, more especially as regards their food, as can be found north of "Mason and Dixon's line," or for that matter, as can be found anywhere within the domain of the "Stars and Stripes."

I have lived and practiced medicine for thirty-one years in Texas, and this is the first time I have ever heard intimated, much less charged, that any human being here ever fed even a dog, much less a child, upon the "vomit" of another person. It is true that, though not a common practice, sometimes mothers chew up food for their babes, and so feed them; but even that is not as filthy as the nursing-bottles and tubes with which Yankee shrewdness has flooded the country, manage them how you may. And I venture here to assert, without a fear of successful contradiction, that, apart from the influence of malaria, with which God has poisoned the atmosphere of many districts in the South, the children of Texas are as healthy and the mortality among them far less than in Philadelphia.

As for dirt-eating, 'tis far less common than Dr. Vanderbeck supposes. In the nearly a third of a century, I have dwelt in Texas, and with an extensive acquaintance all the while, I can safely and truthfully say I have never known a dozen of even suspected cases, and but three or four in which the fact could be established. The most ignorant classes, the most destitute negroes, are not guilty as charged, and would be as far from so living as would be Dr. V. himself. I would not be understood to be an advocate of feeding children with chewed food where not absolutely necessary, but I cannot see that the saliva of the mother is any more filthy and unhealthy than

her milk; and when it is necessary to give chewed food, as is sometimes the case, I can see nothing so criminal that the mother, a nice lady perhaps, should be compared to "a bitch." It is a well established fact that as a rule Southern women mature and marry sooner than their Northern sisters, and have children much faster. Hence it becomes necessary often to wean and rear the offspring by hand. Suitable other food cannot be always be had, the child cannot masticate for itself, nor can the food always be chopped fine—comminuted—so as to be ready for reception by the stomach in any other way; hence the mother chews up and places the food in the child's mouth, but never so far as I have heard *regurgitates—vomits*—it. Nor have I ever heard in Texas of even one instance in which feeding a child upon chewed food inoculated it with syphilis. Syphilis in the rural districts and small towns of Texas is a very rare disease. It is doubtless more common in the cities, particularly where there are Mexicans, but of that I cannot speak positively of my own knowledge.

But I have had my say. I have set nothing down in malice. I have only tried to correct and refute what I know of my own knowledge to be a gross libel upon Texan mothers particularly.

THOS. M. MATTHEWS, M. D.

Athens, Henderson county, Texas, August 21, 1884.

## About Boils.

EDS. MED. AND SURG. REPORTER:

The query about the treatment and prevention of boils is perennial, and the answers are multitudinous and unsatisfactory. Bartholow says arsenic, sulphide of calcium, or phosphorus, long-continued, will bring to a stop a succession of boils; also, that a strong solution of nitrate of silver in nitrous ether is "most efficient" applied locally to the boil and adjacent territory very early. Fused nitrate of silver applied thoroughly to the center of the boil in the earliest stage is the treatment of some practitioners, but it has never been of the least use in my experience, which has been somewhat large as well as partially personal.

Other remedies which have been recommended from time to time for internal administration are alkalies, sulphur, sulphite of sodium, and tar. An old lay remedy of repute, said to have been learned from the Indians, is milk in which a bar of lead has been boiled. I have never tried this last, but intend to do so, as reports I have heard lead me to believe it has some value. Various herbs of a supposed "blood-purifying" tendency are used by the old women.

An immense number of boils afflicting us gave my father and myself favorable opportunities to experiment clinically, and we have tried all the local treatment we heard or thought of. A fly blister is extremely painful and of very little value; aqua ammonia sometimes does harm; early and deep incisions lessen the subsequent pain; collodion early sometimes influences the subsequent course favorably. Dr. Jackson, in "Letters to a Young Physician," says a crucial incision, the lines of which meet in the exact centre of the young boil will abort it—perhaps failure with this is due to missing the middle by a micro-millimeter; lunar caustic is a failure. In the July Compen-

*idum of Medical Sciences* is an article on the local treatment of furuncle which I believe to be more nearly a reconciliation of its pathology and clinical history than any hitherto advanced. Since receiving the the article, my attempts to utilize it have been thwarted by accidental interruption of the antiseptis.

When once one has become convinced of the futility to abort furuncle, any simple poultice may be used to promote suppuration. For my own boils I much prefer simple vaseline spread thickly on a piece of muslin. As soon as fluctuation can be felt, open deeply with a sharp bistoury, and expel the pus. Remove the core with a delicate pair of forceps soon as it is formed, and keep on the vaseline for a day longer. The crop of small pustules which spring up around the site of a large boil are best treated by the local application of spts. camphoræ, repeated on evaporation until a laver of canphor is formed.

All attempts to abort or prevent a succession of boils are unsatisfactory, though all the methods named above succeed in some cases. If the boils are your own, a course of experiments with them is interesting. If they are your patient's, put him on one-grain gelatin-coated pills of sulphide of calcium every three hours, and vaseline locally. If they still come, try phosphorus next, and after that arsenic internally. If each of these three continued for a month does no good, you are justified in trying anything else your knowledge of the physiological action of drugs may suggest. Remember that furuncle sometimes gets well without or in spite of treatment.

G. WALTER BARR, M. D.

Bridgeport, Ill.

#### FOREIGN CORRESPONDENCE.

##### Medical Study in Germany.

EDS. MED. AND SURG. REPORTER:—

Vienna is the great, so to say, fashionable medical centre (a Scotch physician does not think his medical education complete if he has not been at least a *semester* in Vienna); here in the large court-yards of the Allgemeines Krankenhaus physicians of all parts of the world meet, almost all possible tongues are heard (I met six American female physicians during my ten weeks' stay), all come to profit by the large amount of material and hear the great teachers—if all profit is another question; those who stay but a short time do not understand the German language, or are insufficient in anatomy, physiology, pathology, etc., are apt to go away rather confused than enlightened. Courses (practical) can be taken in Vienna in all possible branches of medicine, they are from five to six weeks' duration, and cost at an average, \$10 to \$15 per course; any one can take part in the courses (no papers necessary), the number of students admitted in a course is generally ten to fifteen. It may happen that two to three months have to be waited before a course can be entered. The material is plentiful, therefore, the cases follow for the those who are not sufficiently theoretically posted, in too rapid succession, and tend to confuse.

The life in Vienna is much more expensive than in any of the German cities.

The regular clinics of Billroth, Nothnagel, etc., can be visited free of charge by giving a card to the respective first assistants; they are overcrowded. Billroth is the very ideal of an operator; but he speaks very little, and with a low voice, it is difficult to understand him, therefore, for those who sit a little high up.

In Berlin, also, practitioner's courses have been started some time since; each course lasts four weeks, and the number of attendants is limited to six—an advantage over the Viennese courses—the instruction is thorough and systematically, but the material is as yet rather small, as the royal polyclinic is not yet at the disposal of the privat docents, who run these courses; they have started private clinics for themselves, the faculty being opposed to the practitioners' courses, pedantically thinking that everyone ought to immatriculate for a full semester, who want to study in Berlin. The fee for a course is \$7.50. The clinics of Bergmann, Martin, etc., may also be visited free of charge, for a short time, by presenting a card. Bergmann, also, is an excellent operator, and besides a good speaker and instructor. In the clinic he is perfectly at ease, no haste, no excitement, the very opposite from what your reporter in one of your journals found him to be in his private office.

Those who wish to pursue theoretical studies, and immatriculate for a full semester (any physician with a diploma can do so), best go to one of the medium and small German universities, as Leipzig, Munich, Halle, Kiel, etc., here the classes are not over-filled, the mind is not so much deviated from study as in large places, and the living is cheap. The different institutes for theoretical study are excellent; Munich has besides, the advantage of being the centre of arts, and offers, therefore, many recreations; in Leipzig is good music during the winter; Halle has magnificent new clinical structures (excellent clinic of Volkmann), and Kiel, as the smallest place, gives the best chance for quiet study, and has besides, excellent instructors, who give all possible facilities to students.

In all German clinics the same minute attention is paid to cleanliness. Operator and assistants all wear white linen coats, hands and finger-nails particular attention is paid to; also the parts to be operated upon are dressed antiseptically twenty-four hours before the operation, are shaved and cleaned. In Esmarch's clinic in Kiel, all reservoirs for antiseptic solutions, all pans and dishes for instruments, etc., are from heavy white, transparent glass, the tables are covered with heavy, polished, transparent glass plates, so that all particles of dirt may be detected; the fragility of the material does not prevent the Professor from using it.

Berlin, Aug. 5, 1884.

J. H. VOJE, M. D.

—Dr. W. Thornton Parker, of Fort Union, N. M., writes to the *Med. Record*: "Among the recruits lately arrived at this post is a man who was vaccinated successfully when two years of age. Soon afterward he contracted small-pox, and in May of this year was again successfully vaccinated."

## NEWS AND MISCELLANY.

## Sanitary Rights of Tenants.

The frequency with which people go to court for redress from injury suffered through poor plumbing makes the following comment of one of the New York City judges quite appropriate: "It would seem, however, from the number of cases which come before the court for determination, that plumbing is deemed exceptional in its character.

"The roof may leak, the plastering give way, the doors and windows be broken, and other misfortunes incident to housekeeping may occur, and no claim is made that an eviction has been established, or a right of action has accrued against the landlord for the tenant's ill health; but if a pipe becomes filled up (by neglect or otherwise), or if the solder becomes loosened, or the pipe itself becomes deranged, or the main sewer is in such a condition as to empty the traps, the tenant for some reason claims that a different rule applies.

"Now, if a tenant elects to hire a house which empties into a sewer, with ramifications throughout his sleeping apartments, he does so with all the liabilities that such an election engenders, and with full knowledge that no plumber has yet been able to keep out the gas or prevent the smells.

"The repairs of a sewer-pipe are not different from the repair of a window or a door, and the distinguishing injury arising from such neglect is not only incidental and remote, but as a matter of fact, is the result of the tenant's own election. He hired the premises with full knowledge of these connections, and the landlord is not chargeable with such consequential injuries as may arise from any defect that time and use produce. Under such circumstances, smells and even sickness are not only not extraordinary, but are inevitable; and I fail to see how this furnishes any ground of action against the landlord. \* \* \*

\* \* \* The charge of concealment and deception in this class of cases is undoubtedly an outgrowth of anger, which has its source from the painful effects of such defects; but the law in its present state furnishes no remedy to the tenant that I know of, and it rests with the Legislature to make landlords and builders liable in such cases, for the common law throws the responsibility upon the tenant, and I know of no provision which exempts the plumbing or the sewer fixtures from these well-settled provisions."

## Over-pressure at Schools.

That the majority of city girls, the daughters of well-to-do parents are subjected to too much mental and too little physical training there can be very little doubt. In order to draw more attention to this subject, we note the following from the *Brit. Med. Jour.*, August 2, 1884:

"In his recent periodical reports on the health of Kensington, Dr. Orme Dudfield has contributed some interesting facts in connection with over-pressure at schools. In the report for June last, he observes that one out of four deaths registered from enteric fever occurred in a female child, aged

eight years, whose sister, aged eleven, died on June 1, after six days' illness, from congestion of brain and convulsions. Referring to the latter death, the medical man added the following note to his certificate: 'This is the second child in my practice, within a week, whose death has been accelerated by overpressure at a board-school.' Dr. Dudfield is informed that the symptoms in both sisters were similar, so that it may be a question whether both cases were not of the same nature. An earlier report contained an account of the death, under peculiar circumstances, of a school girl, aged twelve. Feeling unwell, she was sent home; and on the next day was taken to one of the so-called 'dispensaries,' a doctor from which attended her at home until she died. This doctor refused to certify the cause of death, and an inquest was called for; the result of the post-mortem examination resulting in a verdict of death from typhus. It is possible, however, as Dr. Dudfield observes, that the child may have died from brain-trouble, *e. g.*, meningitis. Her father stated that she was much excited and anxious in connection with an approaching school examination, and that, until she became delirious on the third day preceding death, she was constantly engaged in calculations, recitations, etc. Curiously enough, after the report was in type, Dr. Dudfield received notice of the death of a girl of the same age (12), a pupil at a board-school, from 'over-application to study: meningitis.' Dr. Dudfield adds, as worthy of mention, that, some few years ago, the death of a young lady was certified as typhus, which, after careful inquiry, he satisfied himself was really due to over-application to study, leading to meningitis."

## Sanitary Paving of Streets.

The following suggestion from the *British Medical Journal* is worthy of reproduction:

"At the present season, when the imperative necessity of immediately removing anything that may contaminate the atmosphere, or serve as a medium for the dissemination of the germs of disease, is fully recognized, it is not much to be desired that our streets, and especially our back streets and slums, should be more generally paved with some material, such as asphalt, which, being non-absorbent and impervious, cannot retain any liquid impurity, while its perfectly smooth and level surface is not only washed down by every shower of rain, but offering no obstruction to the free action of the broom, is kept perfectly clean with the greatest ease, preserving the atmosphere in a sweet and wholesome condition?"

## A Woman Resident in the Philadelphia Maternity Hospital.

At a recent meeting of the Obstetrical Staff of the Maternity Hospital the following resolution was unanimously adopted: "*Resolved*, That the Obstetrical Staff of the Maternity Hospital desire, if agreeable to the Board of Governors, that a female resident physician be appointed to serve in the Maternity Hospital, the length of term to be regulated by circumstances, not longer than one year." This resolution was presented to the Board of Governors at their regular monthly meeting, held August 26, at the hospital, when they unanimously resolved

1. That the Maternity Hospital should have a resident physician; and,
2. That the resident physician must be a woman.

#### Items.

—Mr. Thomas Jones reports in the *Lancet*, Aug. 2, 1884, a successful extirpation of the larynx for epithelioma.

—In the *Medical Record*, August 16, 1884, Dr. C. C. Stockard reports a fibro-cyst of uterus weighing one hundred and thirty-five pounds.

—In the *Lancet*, August 2, 1884, Mr. Charles N. Macnamara reports a case of obstruction of the œsophagus successfully treated by gastrostomy.

—The true use of a porous plaster, according to a Milwaukee druggist, is "to retain the back in its proper place and let the pain crawl out through the holes."

—In the *British Med. Jour.*, Aug. 9, 1884, Dr. W. A. Meredith reports fifty cases of completed ovariectomy, with brief notes of nine other cases of abdominal section.

—In a case of mammary cancer in a young married woman in the fifth month of pregnancy, MM. Trélat, Polaillon, Terrillon, Guéniot, and Verneuil all advised immediate operation.

—"So you prefer my medicines to those of Dr. Pillsbury, Mrs. Mulligan?"

"Och, indeed, dochter dear, ye're a deal better than th' other ould humbug."

—In the *Lancet*, August 2, 1884, Dr. Judson S. Bury reports a case of congenital contraction of the orifice of the pulmonary artery from fusion of the valves; foramen ovale open.

—The Queen of England has appointed Sir Prescott Gardiner Hewitt, Bart., F. R. S., to be one of her Majesty's Sergeant-Surgeons in Ordinary, in the place of the late Mr. Cæsar Hawkins.

—An eburnated exostosis of the frontal bone, filling up the orbital cavity, has been removed by M. Badal by means of mallet and chisel, healing taking place without damage to the eye or vision.

—Boegehold reports a case in which, during the removal of a malignant tumor of the neck, the thoracic duct was opened. Simple compression controlled the escape of chyle, and the wound did well.

—Gastrostomy, Radical Cure of Hernia, and Thyroidectomy, was the title of Sir William MacCormac's address at the opening of the section of Surgery at the last meeting of the British Medical Association.

The *Glasgow Medical Journal*, for August, 1884, contains an excellent article by Dr. George S. Middleton, on the pathology of pseudo-hypertrophic muscular paralysis, with remarks on a so-called degeneration of the nervous system.

—A preliminary meeting has been held, and the necessary steps taken, for the formation in Glasgow of a Society for the Prevention of Cruelty to Children. It is to be on the same basis as those already existing in London and Liverpool.

—The *Therapeutic Review* says, "Methyl salicylate (oil of winter-green), mixed with an equal quantity of olive-oil, or linimentum saponis, ap-

plied externally to inflamed joints affected by acute rheumatism, affords instant relief, and, having a pleasant odor, its use is very agreeable."

—The first factory in Scotland for the manufacture of ice has been established at Hogganfield, near Glasgow. The ammoniacal process is the one that has been adopted, and the ice is to be frozen from filtered Loch Katrine water. The increased demand for pure ice, in health as well as in sickness, and the difficulty of obtaining it free from organic impurities, marks this as an undertaking of considerable importance and public utility.

—Prof. Da Costa teaches that in the early stages (before contraction) of interstitial hepatitis (cirrhosis), a cure may be effected, but that after contraction nobody ever recovered. He has seen the disease in women who did not drink, and the worst case he ever had was in a boy four years old, in which the diagnosis was confirmed at the autopsy. Inherited syphilis is a cause of it. In the early stages the remedies are leeches, sulphate of magnesium, cream of tartar, iodide of potassium.

#### QUERIES AND REPLIES.

In answer to the query of M. S., in REPORTER for August 9, I have used pills of calcium sulphide gr.  $\frac{1}{10}$  t. i. d., with excellent result. Yours truly, SPENCER M. FREE, M. D.

EDS. MED. AND SURG. REP.—

What is the best treatment for gelatinoid polypus? Would like to have opinions through the columns of the REPORTER from the profession. S. M., M. D.

#### MARRIAGES.

EAKIN—TEVIS.—In Philadelphia, on July 31, by Rev. Matthew Newkirk, D. D., Dr. A. Louis Eakin and Margaret W. Tevis.

HANES—STONE.—At St. Paul church, Cincinnati, Ohio, July 23, 1884, by the Rev. Daniel Benedict, D. D., Dr. J. C. Hanes, of Wyoming, Iowa, to Miss Eunice A. Stone, of Cincinnati.

KING—BUTLER.—In New York, Thursday, August 7, by the Rev. Henry Chamberlain, Oliver R. King, M. D., to Mary W., daughter of Henry Butler.

RISHEL—ARMSTRONG.—June 18, by Rev. T. R. McDowell, George P. Rishel, M. D., of Bellefonte, Pa., and M. Louise Armstrong, of Fair Hill, Md.

#### DEATHS.

BARNES.—In St. Louis, July 15, A. F. Barnes, M. D., after a long and painful illness, in his 58th year.

BEARD.—In Evansville, Ohio, July 26, of lockjaw, after a short illness, Dr. S. C. Beard, aged 35 years.

CHANDLER.—In New Orleans, July 18, 1884, Dr. Wm. S. Chandler, aged 74 years, a native of Hopkinton, N. H., and a resident of New Orleans for the past forty years.

DAYHUFF.—In Kokomo, Ind., July 22, Dr. And. F. Dayhuff, aged 57 years.

PARRISH.—Of paralysis, in the county of Goochland, Va., on the 4th inst., Dr. Robert G. Parrish, in the 70th year of his age.

VALENTINE.—At Lucerne, Switzerland, on Thursday, August 7, 1884, Samuel M. Valentine, M. D.

WEBSTER.—In St. Louis, Dr. A. W. Webster, July 30, in the 77th year of his age.

WOODWARD.—In Philadelphia, Pa., suddenly, on August 17, Dr. Joseph Janvier Woodward, U. S. Army, in the 51st year of his age.